

# STIC Search Report Biotech-Chem Library

#### STIC Database Tracking Number: 145604

TO: Minh-Tam Davis

Location: REM-3A24&3C18

**Art Unit: 1642** 

Thursday, March 03, 2005

Case Serial Number: 10/099791

From: Deirdre Arnold

**Location: Biotech-Chem Library** 

**REM 1A64** 

Phone: 571-272-2532

Deirdre.Arnold@uspto.gov

#### **Search Notes**



Modified Request

Please feel free to contact me if you have any questions or would like to amend the search.

Thank you for using STIC services.

Regards,

Deirdre Arnold



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#### STIC-Biotech/ChemLib

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| From: |  |  |

Davis, Minh-Tam

Friday, February 18, 2005 2:27 PM

To: Subject:

Sent:

STIC-Biotech/ChemLib

Search request for 10/099791

Please search in commercial database, issued patent files, PGPUB and interference:

1) SEQ ID NO:2 2) SEQ ID NO:4-11 (Fragments of SEQ ID NO:2), with and without size limitation of the sequences in database to the size of the corresponding sequences. cancelled

MINH TAM DAVIS

ART UNIT 1642, ROOM 3A24, MB 3C18

272-0830

| STAFF ( | JSE | ONL |
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Searcher: Appld
Searcher Phone: 2-253 Date Searcher Picked up: Date Completed: \_\_\_\_\_\_\_\_\_

Searcher Prep/Rev. Time: Online Time:

NA Sequence: #\_ AA Sequence:#\_ Structure: #\_ Bibliographic: Litigation: Patent Family:\_ Other:\_

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Type of Search

Vendors and cost where applicable STN: DIALOG: QUESTEL/ORBIT: LEXIS/NEXIS: SEQUENCE SYSTEM:\_ WWW/Internet:\_ Other(Specify):\_

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GenCore version 5.1.6
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March Run on:

3, 2005, 07:50:03 ; Search time 70 Seconds (without alignments) 872.973 Million cell updates/sec

US-10-099-791E-2

Title: Perfect score:

1 MASRSMRLLLLLSCLAKTGV......LTWSSNECNKRQHFLCKYRP 158 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

2105692 seqs, 386760381 residues Searched:

2105692 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

geneseqp20028:\* geneseqp2003as:\* geneseqp2003bs:\* geneseqp20048:\* A\_Geneseq\_16Dec04:\* geneseqp1990s:\* geneseqp2001s:\* geneseqp1980s:\* Database.

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

| DB ID Description          | 2 AAW12691 Aaw12691 Human col | 2 AAW37929 A human | AAW37866 Aaw37866 | 2 AAW84274 Protein | 3 AAB12900 Human | 4 AAB74934 Human | 4 AAM24519 Aam24519 C880P | 4 AAM24520 Aam24520 C880P | 4 AAM24521 C880P | Aam24517 | 4 AAM24518 C880P | 5 AAE29829 Auman |       | ABR58551 | ABP56022 |       | ABP55366 | ABP55370 | ABP55369 | 6 ABP55367 Auman | 6 ABP55368 Human | 7 ADB80529 Adb80529 Ovarian | 7 ADB75523 Prostate | 7 ADF16659 Human |
|----------------------------|-------------------------------|--------------------|-------------------|--------------------|------------------|------------------|---------------------------|---------------------------|------------------|----------|------------------|------------------|-------|----------|----------|-------|----------|----------|----------|------------------|------------------|-----------------------------|---------------------|------------------|
| %<br>Query<br>Match Length | 158                           | 158                | 158               | 158                | 158              | 158              | 158                       | 158                       | 158              | 158      | 158              | 158              | 158   | 158      | 158      | 158   | 158      | 158      | 158      | 158              | 158              | 158                         | 158                 | 95.              |
| &<br>Query<br>Match        | 100.0                         | 100.0              | 100.0             | 100.0              | 100.0            | 100.0            | 100.0                     | 100.0                     | 100.0            | 100.0    | 100.0            | 100.0            | 100.0 | 100.0    | 100.0    | 100.0 | 100.0    | 100.0    | 100.0    | 100.0            | 100.0            | 100.0                       | 100.0               | 100.0            |
| Score                      | 878                           | 878                | 878               | 878                | 878              | 878              | 878                       | 878                       | 878              | 878      | 878              | 878              | 878   | 878      | 878      | 878   | 878      | 878      | 878      | 878              | 878              | 878                         | 878                 | 878              |
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| ADF85474<br>ADH21872<br>ADN39463<br>ADN39882   | ADN39820<br>ADN39543<br>ADI58211<br>ADI35904 | ADQ29679<br>ADQ80399<br>ADP55956<br>AAG75620   | ADF16496<br>ADH21795<br>ABB99310<br>AAY92267   | ADF73150<br>ABP76307<br>ABP59097<br>AAP81513  |
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# ALIGNMENTS

Colon specific protein; colon cancer; metastasis; diagnosis; therapy; antibody; vaccine; agonist; antagonist. AAW12691 standard; protein; 158 AA. Li Y, Dillon PJ; Human colon specific protein. (HUMA-) HUMAN GENOME SCI INC. 95WO-US007169 06-JUN-1995; 95WO-US007169 31-MAY-1997 (first entry) WPI; 1997-043162/04. N-PSDB; AAT51784. Homo sapiens. WO9639541-A1 06-JUN-1995; 12-DEC-1996. Soppet DR, AAW12691; Colon AAW1269 

New isolated colon specific gene - used to develop prods. for use in the diagnosis and treatment of colon disorders, partic. colon cancer.

Claim 1; Page 53; 64pp; English.

A human colon specific protein (AAW12691) is a potential diagnostic marker for colon cancer. It is believed that the presence of active transcription of the colon specific gene in non-colon calls of a host is indicative of colon cancer metastases. The amino acid sequence of the colon specific protein was deduced from a cDNA clone (AAY51784) isolated from a human colon cancer cDNA library. Recombinant colon specific protein can be produced in transformed host (e.g. bacterial, insect) cells and used to develop prods. for the diagnosis and treatment of colon disorders, partic. colon cancer metastasis. Antibodies raised against the protein can be used to target cancer cells and as part of a colon cancer

Sequence 158 AA;

121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158 

1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS

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Pred. No. 6.8e-83; ; Mismatches 0; Indels

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Best Local Similarity 100. Matches 158; Conservative

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regulation; cell growth, development, tumourogenesis, neurodegeneration,
inhibition; treatment; prevention; neoplasia; metastesis,
neurodegenerative change; Alzheimer's disease; Down's syndrome;
regeneration; pancreatic beta-cells; diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated human Reg I-gamma protein - useful for developing products for treating, e.g. diabetes, tumours or neuro-degenerative disease such as Alzheimer's.
                                                                                                                               1 MASRSMRLILLISCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS
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Ouery Match 100.0%; Score 878; DB 2; Length 1!
Best Local Similarity 100.0%; Pred. No. 6.8e-83;
Matches 158; Conservative 0; Mismatches 0; Indels
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LD AAW 37929
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                                                                                                                                                      Human protein; secretory signal; nutritional source; cytokine; immunity; haematopoiesis; activin; inhibin; tumour; chemotactic; chemokinetic; thrombolytic; anti-inflammatory; inhibition; stomach cancer cell.
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                                                                                                                        Human protein comprising secretory signal amino acid sequence 3.
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100.0%; Score 878; DB 2; Length 158;
Best Local Similarity 100.0%; Pred. No. 6.8e-23;
Matches 158; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                               Kobayashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 67-68; 131pp; English.
                             AAW37866 standard; protein; 158 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                           Yamaguchi T,
                                                                                                                                                                                                                                                                                                                                                                            (SAGA ) SAGAMI CHEM RES CENTRE. (PROT-) PROTEGENE INC.
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                                                                                         10-AUG-1998 (first entry)
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The present sequence represents a human Reg I-gamma protein, which comprises a C-type lectin. The sequence was identified in Incyte clone 1310334. Reg I-gamma protein is involved in regulation of cell growth and development. Since the oversynession of reg proteins is associated with tumourogenesis and neurodegeneration, inhibition of human Reg I-gamma and neurodegenerative changes associated with Alzheimer's disease and other disorders of the central nervous system, e.g. Down's syndrome. Reg pancreatic beta-cells in the treatment of diabetes. The products can also be used in therapeutics to induce regeneration of pencreatic beta-cells in the treatment of diabetes. The products can also be used for detection for, e.g. expression of REG I-gamma, diagnosis and

Length 158;

100.0%; Score 878; DB 2;

Sequence 158 AA;

Query Match

drug screen

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Homo sapiens.
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YGNGAHLASILSIKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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                                                                                                                                                                                                   Human, colon specific gene; diagnosis; colon disorder; colon cancer, viability; colon cancer cell.
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                                                                                                                                                                                Protein encoded by a human colon specific gene
                                                                                                              AAW84274 standard; protein; 158 AA
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                                                                                                                                                           (first entry)
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Matches 158;
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Novel human colon specific polypeptides and polynucleotides for diagnosis and treatment of colon cancer, for screening compounds which interact with polypeptide, for synthesis of DNA and manufacture of DNA vectors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention relates to a purified human protein, which is primarily expressed in tissue derived from the colon. The protein is 152 amino acids in length and exhibits cytostatic activity. The present sequence represents the amino acid sequence of the colon specific protein. The protein can be used in the diagnosis and treatment of colon cancer, and it is thought that abnormally high levels of the gene expression in non-colon cells is an indication of colon cancer metastasis
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                                                                                                                                                                                                                              Human; colon specific; colon cancer; metastasis; diagnose; treatment;
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100.0%; Pred. No. 6.8e-83;
ive 0; Mismatches 0;
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                                                                                                                                                                  Human colon specific protein sequence.
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AAB12900 standard; protein; 158 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUMA-) HUMAN GENOME SCI INC.
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                                                                                                               (first entry)
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Best Local Similarity 100.
Matches 158; Conservative
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06-MAR-2000; 2000US-00519444.
19-MAY-2000; 2000US-0057551.
29-UUX-2000; 2000US-00609448.
28-AUG-2000; 2000US-00649811.
                                                                                                 WPI; 2001-441847/47.
                                                     (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 158 AA;
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                                                                               King GE,
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                                                                                                                                                                                                          The present sequence represents a human TSA7005 protein which shares 32% homology with human and mouse Reg proteins, and 34% homology with the rat Reg protein. TSA7005 has pancreatic beta cell growth activity and hypoglyceemic activity. The TSA7005 protein can be used for the diagnosis and treatment of diseases associated with the gene and its expression
                                                                                                                                                                                                                                                                                                                                                                61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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                                                                                                                                                                                                                                                                                                                                          TSA7005 gene, encoding a polypeptide useful for the diagnosis and treatment of diseases associated with its expression.
Human; TSA7005; Reg; pancreatic beta cell growth; hypoglycaemic;
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                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 878; DB 4; Length 158; Best Local Similarity 100.0%; Pred. No. 6.8e-83; Matches 158; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   121 KSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYRP 158
                                                                                                                                                                                                                                                                                                                                                                                                                C880P similar amino acid sequence (GENESEQ W37866).
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                                                                                                                                                                                         Claim 1; Page 23; 25pp; Japanese.
                                                                                                   99JP-00201279.
                                                                                 99JP-00201279.
                                                                                                                    (SAKA ) OTSUKA PHARM CO LID,
                                                                                                                                    WPI; 2001-303742/32.
N-PSDB; AAF82117, AAF82118.
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10-JAN-2000; 2000US-00480321.
15-FEB-2000; 2000US-00504629.
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                                                                                                                                                                                                                                                                          Sequence 158 AA;
                                             JP2001025389-A.
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                            Homo sapiens.
                                                                                15-JUL-1999;
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           diagnosis.
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The present invention describes colon tumour associated proteins (I) and (II) and (II) can be used in gene therapy and vaccine production. (I) and (II) and be used in gene therapy and vaccine production. (I) and (II) may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate colon tumour associated protein (TCAP) (II) may be used to treat disorders associated with decreased expression by rectifying expression, such as colonic cancer. For example, (I) and (II) may be used to treat disorders associated with decreased expression by rectifying computations or deletions in a patient's genome that affect the activity of TCAPs by expressing inactive proteins or to supplement the patients own production of them. Additionally, (II) may be used to produce the TCAP proteins, by inserting the nucleic acids into a host cell culturing the compression by inserting the nucleic acids in associated in associated with associated may be used to produce the TCAP and hybridisation assays to detect and quantitate the production captesion and activity. The anti-(I) and captivity modulators of TCAPs and in assays to identify modulators of TCAPs and in assays to identify modulators of TCAPs and the activity. The anti-(I) antibodies and antagonists may also be used to down regulate TCAP expression and activity. The anti-(I) antibodies may also be used as diagnostic agents for detecting the antibodies may also be used as diagnostic agents for detecting the contribution and activity of presence of TCAPs in samples (e.g. by enzyme linked immunosorbant assay) and antibodies and antagonists represent control control control and payalson in the exemplification of the
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                                                                                                                                                                                    Colon tumor associated proteins and nucleic acids useful for the prevention, diagnosis and treatment of colonic cancer.
                 Stolk JA;
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        Benson DR, Meagher MJ,
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100.0%; Pred. No. 6.8e-83;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                 Claim 2; Page 467-468; 472pp; English.
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Lodes MJ, Secrist H,
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Best Local Similarity 100.09
Matches 158; Conservative
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(first entry)

us-10-099-791e-2.rag

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AAM24521 standard; protein; 158 AA.
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RESULT 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes colon tumour associated proteins (I) and the polynucleotides (II) that encode them. (I) have cytostatic activity. (I) and (II) can be used in gene therapy and vaccine <u>production</u>. (I) and (II) may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate colon tumour associated protein (TCAP) expression, such as colonic cancer. For example, (I) and (II) may be used to treat disorders associated with decreased expression by rectifying
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Page 468; 472pp; English
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                                                                                                                                                                                    29-DEC-2000; 2000WO-US035596.
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2000US-00504629
2000US-00519444
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E, Wang T, Jiang Y;
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                                                                               WO200149716-A2.
                              Homo sapiens.
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Matches 158;
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King GE,
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The present and described them. (1) have cytostatic activity.

(I) and (II) can be used in gene therapy and vaccine production. (1) and (II) may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate colon tumour associated protein (TCAP) expression, such as colonic cancer. For example, (1) and (II) may be used corrects associated with decreased expression by recrifying mutations or deletions in a patient's genome that affect the activity of TCAPs by expressing inactive proteins or to supplement the patients own production of them. Additionally, (II) may be used to produce the TCAP proteins, by inserting the mucleic acids into a host cell culturing the cell to express the protein. (II) and its complementary sequences may also be used as DNA probes in diagnostic polymerase chain reaction (PCR) and hybridisation assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. (I) may also be used as antigens in the production of antibodies against TCAPs and in assays to identify modulators of TCAP expression and activity. Anti-(I) antibodies and ancadomiates may also be used to down regulate TCAP expression and activity. The anti-(I) antibodies may also be used as diagnostic agents for detecting the correction of antibodies may also be used as diagnostic agents for detecting the presence of TCAPs in samples (e.g. by enzyme linked immunosorbant assay (ELISA)). AAL28460 to AAL29512 and AAM249494 to AAM24521 represent
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                                                                                                                      Human; immunotherapy; diagnosis; colon cancer; colon tumour; immunogenic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acids useful for the of colonic cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Benson DR, Meagher MJ,
                                                                              C880P similar amino acid sequence (GENESEQ W84274).
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100.0%; Pred. No. 6.8e-83;
ive 0; Mismatches 0;
                                                                                                                                         gene therapy; vaccine; colonic cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; Page 469; 472pp; English.
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King GE, Wang T, Jiang Y;
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2000US-00575251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-441847/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CORI-) CORIXA CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                          19-MAY-2000; 29-JUN-2000; 28-AUG-2000; 2
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10-JAN-2000;
15-FEB-2000;
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Best Local (
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MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS 60

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61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWIDGAMYLYRSWSG 120

KSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYRP 158 

121 121

YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120

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MASRSWRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS

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61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWWDGAMYLYRSWSG 120
                                                                                                                                                                                                                                                                   61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes colon tumour associated proteins (I) and the polymuclectides (II) that encode them. (I) have cytostatic activity. (I) and (II) can be used in gene therapy and vaccine production. (I) and (II) may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate colon tumour associated protein (TCAP) expression, and (II) may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; immunotherapy; diagnosis; colon cancer; colon tumour; immunogenic; gene therapy; vaccine; colonic cancer.
presence of TCAPS in samples (e.g. by enzyme linked immunosorbant assay (ELISA), AAL28460 to AAL29512 and AAM4494 to AAM24523 represent nucleotide and amino acid sequences given in the exemplification of the present invention
                                                                                                                                                                                                                   1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS
                                                                                                                                                                                              1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS
                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Colon tumor associated proteins and nucleic acids useful for prevention, diagnosis and treatment of colonic cancer.
                                                                                                                       Query Match
Best Local Similarity 100.0%; Pred. No. 6.8e-83;
Matches 158; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lodes MJ, Secrist H, Benson DR, Meagher MJ, ,, Wang T, Jiang Y;
                                                                                                                                                                                                                                                                                                                                                               121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
                                                                                                                                                                                                                                                                                                                                        121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C880P similar amino acid sequence (GENESEQ W12691).
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM24518 standard; protein; 158 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Page 467; 472pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JAN-2000; 2000US-00480321.
15-FEB-2000; 2000US-00504629.
06-MAX-2000; 2000US-00519444.
19-MAX-2000; 2000US-00515251.
29-JUN-2000; 2000US-00609448.
28-AUG-2000; 2000US-00609448.
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                                                                                       Sequence 158 AA;
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King GE,
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AAM24518
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production of them. Additionally, (II) may be used to produce the TCAP procedure, by inserting the nucleic acids into a host cell culturing the cell to express the protein. (II) and its complementary sequences may also be used as DNA probes in diagnostic polymerase chain reaction (PCR) and hybridisation assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. (I) may also be used as antigens in the production of antibodies against TCAPs and in assays to identify modulators of TCAP expression and activity. Anti-(I) antibodies and antagonists may also be used to down regulate TCAP expression and activity. The anti-(I) antibodies may also be used as diagnostic agents for detecting the presence of TCAPs in samples (e.g. by enzyme linked immunosorbant assay (ELISA)). AAI28460 to AAI29512 and AAM24494 to AAM24523 represent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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by expressing inactive proteins or to supplement the patients own
                                                                                                                                                                                                                                                      nucleotide and amino acid sequences given in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                      1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS
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                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                            ; Score 878; DB 4; Length 158; Pred. No. 6.8e-83; 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP
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/label= Signal_peptide
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100.0%;
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Best Local Similarity 100.0
Matches 158, Conservative
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                                                                                                                                                                                                                                                                         present invention
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                                                                                                                                                                                                                                                                                                             Sequence 158 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated nucleic acid that is differentially expressed in cancer tissues useful for determining the presence of colon cancer in a cell or tissue type, and in antisense therapy.
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                                                            The invention relates to a method for detecting REG-like protein (RELP) and its mucleic acid sequence. The method is useful for detecting the presence of a tumour. Kits comprising an antibody specific for RELP and reagents for detecting the antibody, or a nucleic acid complementary to portion of a nucleic acid encoding RELP, are useful for identifying the presence of cancer, characterise the cancer, or monitor the course of treatment of cancer. The present sequence is human RELP protein used to illustrate the method of the invention. Human RELP gene is located at
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Lewis ME;
                                                                                                                                                                                                                                                                                                           Gape
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100.0%; Pred. No. 6.8e-83;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein sequence SEQ ID NO:4471.
                                Claim 1; Page 13-14; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB78993 standard; protein; 158 AA.
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Matches 158; Conservative
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Thiaglingam A, Lewis
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N-PSDB; ABQ60776.
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                                                                                                                                                                                                                                           Sequence 158 AA;
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encoding it.
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                                                                                                                                                                                                         chromosome
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encoded by (1) is useful for detecting cancer in a patient sample, and encoded by (1) is useful for detecting cancer in a patient sample, and for detecting the presence or absence of a polynucleotide encoded by a nucleic acid which hybridises to (1) in a call. A probe/primer derived from (1) can be used for determining the presence of a nucleic acid which hybridises to (1), and for determining the phenotype of calls in a sample of calls from a patient. (1) is useful for determining the presence of state of other type of cancer, in antisense therapy, to generate macroarrays on a solid surface, to identify a chromosome on which the corresponding gene resides, and in tissue profiling, forensics, genetic analysis, mapping and diagnostic applications. (1) can be used to raise antibodies, and to screen for peptide analogues and antagonists
                                                                                                                                                                                                                                                                                                                                                                                                                                                61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                               100.0%; Score 878; DB 5; Length 158; 100.0%; Pred. No. 6.8e-83; tive 0; Mismatches 0; Indels
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13-NOV-2001; 2001US-0350666P
08-FEB-2002; 2002US-0355145P.
08-FEB-2002; 2002US-035557P
12-APR-2002; 2002US-0372246P.
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                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0
Matches 158; Conservative
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N-PSDB; ACC72672.
                                                                                                                                                                                                                                                               Sequence 158 AA;
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The present invention describes an isolated nucleic acid molecule, which comprises the sequence of any of the genes that are up-regulated or downergulated in specific cancers (e.g. about 1031 genes up-regulated in cute 1ymphocytic leukemia). ACC72641 to ACC72860 represent cancer related gene nucleotide sequences which encode the proteins given in ABR58521 to ABR58709. Also described: (1) determining the presence or absence of a pathological cell in a patient; (2) an expression vector comprising a nucleic acid molecule described above; (3) a host cell comprising the vector; (4) an isolated above; (3) a host cell comprising the vector; (4) an isolated above; (3) a host cell in a comprising the vector; (4) an isolated by pecifically binds the polypeptide of (4); (6) specifically targeting a compound to a pathological cell in a comprising the yadministering to the patient the antibody above; and (7) a drug screening assay. The nucleic acid is useful as diagnostic markers or the repetut targets. In particular, the nucleic acid is useful for the pone marrow, bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary, calledder, brain, breast, cervix, colon/rectum, kidney, lung, ovary, charton screening, particularly for identifying agents for treating these
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100.0%; Score 878; DB 6;
Best Local Similarity 100.0%; Pred. No. 6.8e-83;
Matches 158; Conservative 0; Mismatches 0;
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Claim 12; Page 737; 767pp; English.
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label= signal
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/label= RELP
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 158 AA;
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The present sequence represents a new isolated REG-like protein (RELP) human immunoglobulin (Ig) derived protein. RELP comprises: (a) a human variable and constant region, or (b) an isolated human Ig derived protein or specified portion or variant encoded by a nucleic acid. RELP has cytosteatic activity and can be used as an Ig agonist and in protein therapy. The RELP human Ig derived protein or a specified portion or variant can be used for preventing or treating a RELP protein mediated condition, malignant condition or disease condition, e.g. cancer: The nucleic acids can be used in producing RELP Ig derived protein. The human RELP protein of the present invention is located to chromosome 1p12-13.1
                                                                                                                                         New isolated REG-like protein (RELP) human immunoglobulin derived protein or specified portion or variant, useful for preventing or treating a RELP protein mediated condition or malignant condition, e.g. cancer.
                                                                                                                                                                                                                                        Claim 1; Fig 2; 101pp; English.
                                                                   WPI; 2003-103204/09.
                                                                                               N-PSDB; ABZ21635
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100.0%; Score 878; DB 6; Length 158;
Best Local Similarity 100.0%; Pred. No. 6.8e-83;
Matches 158; Conservative 0; Mismatches 0; Indels

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1 MASRSMRLLLLLSCLAKTGV.....LTWSSNECNKRQHFLCKYRP 158
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5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
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| 87.7.m. 44.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4  | lication UG<br>Bandman, OJ<br>Goli, Surye<br>Goli, Surye<br>Guences: O<br>CE ADDRESS<br>Incyte Pl<br>Incyte | ity<br>serva                               |
| 4.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6   | 13-1  NEDADJICATION UNT: BANGMAN, O NNT: BANGMAN, O NNT: BANGMAN, O NNT: BANGMAN, O NNT: GO11, SULY NO E INVENTION: N OF SEQUENCES: CONDENCE ADDRESS SSEB: Incyte P TT: Palo Alto TT: TI: TI: TI: TI: TI: TI: TI: TI: TI:   | h<br>Similarity<br>58; Conser              |
| 218<br>208<br>204.5<br>204.5<br>204.5<br>204.1<br>198.5<br>1198.5<br>1198.5<br>1198.5<br>1196.5<br>1196.5<br>1196.5<br>1196.5<br>1196.5<br>1196.5<br>1196.5<br>1196.5<br>1196.5   | SULT 1 -08-729-103-1 Sequence 1, Application US/08729103 Batent No. 5837841 GENERAL INFORMATION: APPLICANT: Bandman, Olga APPLICANT: Bendman, Olga APPLICANT: Olive Diver Drive CITY: Palo Alco COUNTR: US CONTYE: OS CONTYR: US ZIP: 94304 COMPUTER: IBM Compatible OPERATING SYSTEM: MEDIUM TYPE: Diskette COMPUTER READABLE FORM: MEDIUM TYPE: Diskette OPERATING SYSTEM: US/08/729 FILLING DATE: Filed Herewith PRIOR APPLICATION NUMBER: US/08/749 FILLING DATE: Filed Herewith PRIOR APPLICATION NUMBER: SF-146 TILLEPHONE: 415-85-055 TELEFORMUNICATION INFORMATION: TELEFORMUNICA  | ch<br>11 Sir<br>158;                       |
| 20 515151 5151  | T 1 -729-103 uence 1, 3 APPLICANT TITLE OF CORRESPON ADDRESSI STRATE: COMPUTER 1 COMPU  | / Mat<br>Loca                              |
| 00000000000000000000000000000000000000  | in in Ω i   | Query Match<br>Best Local S<br>Matches 158 |
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61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
                                                                                                                      61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGHDPQKRQQWQWIDGAMYLYRSWSG 120
1 MASRSMRLLLLLSCLAKTGVLGDINRPSCAPGWFYHKSNCYGYFRKLRNWSDALLECOS 60
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100.0%; Score 878; DB 2; Length 158;
Best Local Similarity 100.0%; Pred. No. 5.9e-88;
Matches 158; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                            121 KSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYRP 158
                                                                                                                                                                                                       121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
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                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/08468413
Patent No. 58614910
Patent No. 58614910
Patent INFORMATION:
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Colon Specific Gene
NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: 1BM PS/2
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,413
FILING DATE: 06 JUN 95
CLASSIFICATION: 435
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REPERRUCE/DOCKET NUMBER: 32580
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEPAX: 201-994-1744
INFORMATION POR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 158 AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 06 JUN 95
CLASSIFECATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
FILING DATE:
ATJORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
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AMINO ACID
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: NEW JERSEY
RY: USA
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TOPOLOGY: LIN
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US-08-468-413-2
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61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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                                           Sequence 2, Application US/09162508
Patent No. 6080722
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Colon Specific Gene
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS: ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECCHI, STEWART & OLSTEIN
STREET: 8 DESCHER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
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GENERAL INFORMATION:
TITLE OF INVENTION: Human Colon Specific Gene
NUMBER OF SEQUENCES:
GORRESPENDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
STREET: 6 BECKER FARM ROAD
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APPLICATION NUMBER: US/09/162,508
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PLICATOR APPLICATION:
PRIOR APPLICATION NATA:
APPLICATION NUMBER: 08/468,413
FILING DATE: 06 JUN 95
ATTORNEY/ABCHY INFORMATION:
NAME: FERRARC, GREGORY D.
REGISTRATION NUMBER: 36,134
FELEPHORICATION INFORMATION:
TELEPHORICATION OR SEQ ID NO: 2:
SEQUENCE HARACTERISTICS:
LENGTH: 158 AMINO ACIDS
TOTAL AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TOPOLOGY: LINEAR; MOLECULE TYPE: PROTEIN US-09-162-508-2
                                                                                                                                                                                                                                                                                                                                                                                                                    USA
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PCT-US95-07169-2
RESULT 3
US-09-162-508-2
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26 MRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISG
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NAME: Kagan, Sarah A.
REGISTRATION NUMBER: 32,141
REFERENCE/DOCKET NUMBER: 00570.48743
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-508-9100
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Best Local Similarity 30.6%
Marches 52; Conservative
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 79.2%; Score 695; DB 4; Length 122; Best Local Similarity 100.0%; Pred. No. 3.9e-68; Matches 122; Conservative 0; Mismatches 0; Indels
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; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Glordano, J.Y.
; APPLICANT: Glordano, J.Y.
; TITLE OF INVENTION: ESTS and Encoded Human Proteins.
; FILE REPRENCE: GENSET 05.0PR.
; CURRENT PAPLICATION NUMBER: US/09/621,976
; CURRENT PAPLICATION NUMBER: US/09/621,976
; SOFTWARE: Patent.pm
; SOFTWARE: Patent.pm
; SOFTWARE: Patent.pm
; TYPE: REPRENCE: ACCOUNTION OF SEQ. ID NOS: 19335
; STOFTWARE: Patent.pm
; TYPE: REPRENCE: ACCOUNTION OF SEQ. ID NOS: 19355
; TYPE: REPRENCE: Patent.pm
; TYPE: REPRENCE: COUNTION OF SEQ. ID NOS: 19355
; TYPE: REPRENCE: COUNTION OF SEQ. ID NOS: 19355
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                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: 1BM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07169
FILING DATE: 06 JUN 95
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-389
TELECOMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEPHONE: 201-994-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
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TYPE: AMINO ACID
STRANDEDNESS:
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; MOLECULE TYPE: PROTEIN
PCT-US95-07169-2
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ROSELAND
NEW JERSEY
Y: USA
                                                                                  07068
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61 YQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSGKSMGGNKHCAEMSSNNNFLTWSSNE 120
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                                                                         86 YORSOPIWIGLHDPOKROOWOWIDGAMYLYRSWSGKSMGGNKHCAEMSSNNNFLTWSSNE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wilk, Aaron I.
APPLICANT: Pittenger, Gary L.
APPLICANT: Rafaeloff, Ronl
APPLICANT: Rafaeloff, Ronl
APPLICANT: Rafaeloff, Ronl
APPLICANT: Rosenberg, Lawrence
APPLICANT: Dugnid, William P.
TITLE OF INVENTION: INGAP PROTEIN INVOLVED IN PANCREATIC
TITLE OF INVENTION: ISLET NEGENESIS
ONRESPEDENCE ADDRESS:
ADDRESSEE: Banner & Allegretti
STREET: 1001 G Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: US
ZIP: 20001-4597
ZIP: 20001-4597
COMPUTER READABLE FORM:
MEDITOW TYPE: Floppy disk
COMPUTER: IBM PC compatible
OFFRAING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/401,530A
FILING DATE: 22-FEB-1995
CLASSIFICATION: 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..<u>..</u>...
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115 GSLFLYKSWDTGYPNNSNRGYCVSVTSNSGYKKWRDNSCDAQLSFVCKFK 164

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Washington
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 RLLLLLSCLAKTGVLGDIIMRPS------CAPGWFYHKSNCYGYFRKLRNW 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51; Indels 29; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110 GAMYLYRSW-SGKSMGGNK-HCAEMSSNNNFLTWSSNECNKRQHFLCKYR 157
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29.0%; Score 254.5; DB 2; Length 165;
Best Local Similarity 30.6%; Pred. No. 6.60-20;
Matches 52; Conservative 38; Mismatches 51; Indels 29,
    WESULI /
VESULI /
Sequence 3, Application US/08729103
Sequence 3, Application US/08729103
Fatent No. 583781
GENERAL INFORMATION:
APPLICANT: BANDMANTION:
APPLICANT: Goli, Surya K.
TITLE OF INVENTION: NOVEL HUMAN REG PROTEIN
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
CITY: Palo Alto
STARE: CA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALICKAEL, TACKALL THE CALLILLY.

NAME: Billings, Lucy J.

REGISTRATION UNBER: 36 749

REPERENCE, DOCKET NUMBER: 9F-0138 US

TELECOMMUNICATION INFORMATION:

TELEBRONE: 415-845-0555

TELEBRAX: 415-845-4166

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 165 amino acids

TYPE: amino acid

STRANDENRES: single

MOLECULE TYPE: peptide

IMMEDIATE SOURCE:

LIBRARY: Genbank

CLONE: 393209
                                                                                                                                                                                                                                                                                                   ZIP: 94304
COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FRAESEQ Version 1.5
CURRENT APPLICATION NUMBER: US/08/729,103
FILING DATE: Filed Herewith
PRIOR APPLICATION NUMBER: US/08/729,103
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              %30-709-662-7

% Sequence 7, Application US/08709662

% Patent No. 5840531

; GENERAL INFORMATION:

MAPLICANT: Vinik, Aaron I.

APPLICANT: Pittenger, Gary L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
RESULT 7
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87 QRSQP-IWIGLHDPQKRQQWQWIDGAMYLYRSW-SGKSMGGNK-HCAEMSSNNNFLTWSS 143
                                                                                                                                                                                                            55 ELECOSYGNGAHLASILSLKEASTIAEYI-SGYQRSQPIWIGLHDPQKRQQ-----WQWI 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65 DLACOXRPSG-HLVSVLSGSEASFVSSLIKSSGNSGQNVWIGLHDPTLGQEPNRGGWEWS 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISGY 86
                                                                                                                     1 MASRSMRLLLLLSCLAKTGVLGD-----IIMRPSCAPGWFYHKSNCYGYFRKLRNWSDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 26.3%; Score 231; DB 2; Length 174;
Best Local Similarity 32.4%; Pred. No. 2.6e-17;
Matches 55; Conservative 28; Mismatches 73; Indels 14; Gaps
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Vinik, Aaron I.
APPLICANT: Pittenger, Gary L.
APPLICANT: Rafaeloff, Ronit
APPLICANT: Rosenberg, Lawrence
APPLICANT: Rogenberg, Lawrence
TITLE OF INVENTION: INGAP PROTEIN INVOLVED IN PANCREATIC
TITLE OF INVENTION: ISLET NEOGENESIS
                                                    57; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FAPLICATION NUMBER: US/08/401,530A
FILING DATE: 22-FEB-1995
CLASSIFICATION: 800
                                                    27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5, Application US/08401530A Patent No. 5834590 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3: Banner & Allegretti
1001 G Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Kagan, Sarah A.
REGISTRATION NUMBER: 32,141
REFERENCE/DOCKET NUMBER: 005
TELECOMMUNICATION:
TELEPHONE: 202-508-9100
                                                                                                                                                                                                                                                                                                    | |: |:||::
160 ESCEKKFSFVCKFK 173
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                                                                                                                                                                                                                                                                       144 NECNKROHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Rattus rattus
                                                      46; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 202-508-9299
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 20001-4597
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             amino acid
GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
STREET: 10
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US-08-401-530A-5
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                                                      Matches
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Sequence 10686, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
FILE REFRENCE: CLOON 000-04-14

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: PASESEQ for Windows Version 4.0

SEQ ID NO 10686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92 STDDSNVWIGLHDPKKNRRWHWSSGSLVSYKSWDTGSPSSANAGYCASLTSCSGFKKWKD 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    87 QRSQP-IWIGLHDPQKRQQWQWIDGAMYLYRSW-SGKSMGGNK-HCAEMSSNNNFLTWSS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECOSYGNGAHLASILSLKEASTIAEYISGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 240; DB 4; Length 174; Pred. No. 2.7e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; DB 2;
2.6e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27; Mismatches
LIPE: Diskette
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS
SOFTWARE: PASSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/729,103
FILING DATE: Filed Herewith
PHON APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
APPLICATION APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/ACTIVE
NAV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27.3%; Score 240; 34.3%; Pred. No.
                                                                                                                                                                                                                                                                                                                                           PF-0138 US
                                                                                                                                                                                                                                                                                  NAME: Billings, Lucy J.
RECISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27.3%;
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152 ESCEKKFSFVCKFK 165
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 166 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 34.3%
Shoa 46; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                      415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
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Best Local Similarity
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MOLECULE TYPE: pe
IMMEDIATE SOURCE:
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US-09-949-016-10686
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US-08-729-103-4

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MASRSMRLLLLLSCLAKTGVLGD-----IIMRPSCAPGWFYHKSNCYGYFRKLRNWSDA
109 DGAMYLYRSW-SGKSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYR 157
                              109 DGAMYLYRSW-SGKSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26.3%; Score 231; DB 2; Length 174; ilarity 32.4%; Pred. No. 2.6e-17; Conservative 28; Mismatches 73; Indels
                                                                                                                                                                                                APPLICANT: Vinik, Aaron I.
APPLICANT: Pittenger, Gary L.
APPLICANT: Rafaeloff, Ronit
APPLICANT: Rosenberg, Lawrence
APPLICANT: Rosenberg, Lawrence
APPLICANT: Duguid, William P.
TITLE OF INVENTION: ISLET NEOGENESIS
TITLE OF INVENTION: ISLET NEOGENESIS
CORRESPONDENCES: 7
CORRESPONDENCES. 7
ADDRESSEE: Banner & Witcoff, Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: US

ZIP: 20001-4597

COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PRECHININ Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/709,662
FLING DATE: 09-SEP-1996
CLASSIFICATION NUMBER: 32,141
REGISTRATION NUMBER: 32,141
REGISTRATION NUMBER: 32,141
REFERENCE/DOCKET NUMBER: 32,141
REFERENCE/DOCKET NUMBER: 32,141
REFERENCE/DOCKET NUMBER: 32,141
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SERVICES:
SEQUENCE CHARACTERISTICS:
LENGTH: 174 amino acids
                                                                                                                                                                                                                                                                                                                                                   STREET: Banner & Witcoff, Ltd. STREET: 1001 G Street, N.W. CITY: Washington
                                                                                                                                          Sequence 5, Application US/08709662
Patent No. 5840531
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acids
TOPOLOGY: ):--
OLECTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 55; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-401-530A-6
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Sequence 6, Application US/08401530A Patent No. 5834590 GENERAL INFORMATION:

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86 YQRSQPIWIGLHDPQKRQQ-----WQWIDGAMYLYRSWSG--KSMGGNKHCAEMSSNNNF 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
APPLICANT: Vinik, Aaron I.
APPLICANT: Refenger, Gary L.
APPLICANT: Real-Off, Rouit
APPLICANT: Rosemberg, Lawrence
APPLICANT: Rosemberg, Lawrence
APPLICANT: Rosemberg, Lawrence
APPLICANT: Duquid, William P.
TITLE OF INVENTION: INDAP PROTEIN INVOLVED IN PANCREATIC
TITLE OF INVENTION: ISLET NEOGENESIS
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Banner & Allegretti
STRAET: 1001 & Street, N.W.
STRAET: 1001 & Street, N.W.
STRAET: 001 & Street, N.W.
COMPUTER: READABLE FORM:
MEDIUM TYPE: PLOPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/Ms-DOS
SOFTWARE: BACENTIN Release #1.0, Version #1.25
COMPUTER: BACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICANTION NUMBER: 32,141
RESERENCE/DOCKET NUMBER: 32,141
REFERENCE/DOCKET NUMBER: 32,141
REPERENCE/DOCKET NUMBER: 32,141
REPERENCE/DOCKET
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26.0%; Score 228.5; DB 2; Length 174;
Best Local Similarity 34.5%; Pred. No. 4.9e-17;
Matches 48; Conservative 25; Mismatches 57; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/08709662
| Patent No. 5840531
| GENERAL INFORMATION
| APPLICANT: Vinik, Aaron I. APPLICANT: Pittenger, Gary L. APPLICANT: Resenberg, Lawrence APPLICANT: Rosenberg, Lawrence APPLICANT: SEQUENCES: TITLE OF INVENTION: ISLET NEOGENESIS NUMBER OF SEQUENCES:
| NUMBER OF SEQUENCES: TORRESPONDENCE APDRESS: ADDRESSE: Banner & Witcoff, Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139 LIWSSNECNKROHFLCKYR 157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-401-530A-6
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US-08-709-662-6
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Sequence 10685, Application US/09949016

Sequence 10685, Application US/09949016

Batent No. 6812339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;

FILE REFERENCE: CLOOL337

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR PRILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOCTWARE: PRESENCE (Mindows Version 4.0)

SEQ ID NO 10685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86 YQRSQPIWIGLHDPQKRQQ-----WQWIDGAMYLYRSWSG--KSMGGNKHCAEMSSNNNF 138
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                                                                                                                                                                                                             CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER:
CLASSIFICATION NUMBER:
ATONEX/AGENT INFORMATION:
NAME: Kagan, Sarah A.
REGISTRATION NUMBER: 32,141
REGISTRATION NUMBER: 32,141
REGISTRATION NUMBER: 32,05099178
TELEPHONE: 202-508-9100
TELEPHONE: 202-508-9100
TELEPHONE: 202-508-9100
TELEPHONE: 202-508-9100
TELEPHONE: SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 26.0%; Score 228.5; DB 2; Best Local Similarity 34.5%; Pred. No. 4.9e-17; Matches 48; Conservative 25; Mismatches 57;
                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139 LIWSSNECNKROHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | | : |: |: |: |: |: | 155 LKWGDHHCDVELPFVCKFK 173
Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 174 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                         ZIP: Z0001-4597
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS-09-949-016-10685
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Query Match

Best Local Similarity 33.3%; Pred. No. 1.2e-16;

Matches 45; Conservative 26; Mismatches 58; Indels 6; Gaps 4;

Qy 27 RPSCAPGWFYHKSNCYGFRKIRNWADALLYCQNMNSG-NLVSVLTQAEGAFVASIIKES 69

Db 11 RISCPEGTNAYRSYCYYPNEDRETWVDADLYCQNMNSG-NLVSVLTQAEGAFVASIIKES 69

Qy 85 GYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSW--SGKSWGGNKHCAEMŠSNNNFLTWS 142

Db 70 GTDDFN-VWIGLHDPKKNRRWHWSSGSLVSYKSWGIGAFSSVNPGYCVSLTSSTGFQKWK 128

Qy 143 SNECNKRQHFLCKYR 157

Db 129 DVPCEDKFSFVCKFK 143

Search completed: March 3, 2005, 07:55:36

Job time: 23 secs
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March 3, 2005, 07:54:33 ; Search time 132 Seconds (without alignments) 393.857 Million cell updates/sec
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6/ptodata/1/pubpaa/US09G PUBCOMB.pep:
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/cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
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                                                                                                                                                                                                                                                                                                                                                                                                                         1391452
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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Maximum Match 100%
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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| 1                             | Αp                 | Αp          | Ap          | Ap                 | Ap                 | Ap                 | Αp                 | Ap                 | Ap                 | Ap                 | ppli              | , A                | , A                |
| c                             | 1070,              | 1077,       | 1078,       | 1079,              | 1080,              | 1070,              | 1077,              | 1078,              | 1079,              | 1080,              | 2, A              | 4471               | 1070,              |
| Description                   | Sequence           | Sequence    | Sequence    | Sequence           | Sequence           | Sequence           | Sequence           | Sequence           | Sequence 1079,     | Sequence           | Sequence 2, Appli | Sequence 4471, Ap  | Sequence           |
|                               | 70                 | 77          | 78          | 79                 | 80                 | 70                 | 77                 | 78                 | 79                 | 80                 |                   | 471                | 070                |
|                               | US-09-922-217-1070 | -922-217-10 | -922-217-10 | US-09-922-217-1079 | JS-09-922-217-1080 | JS-09-833-263-1070 | JS-09-833-263-1077 | JS-09-833-263-1078 | US-09-833-263-1079 | US-09-833-263-1080 | 9-525-041-2       | US-09-969-034-4471 | US-10-025-380-1070 |
| £ A                           | 0-SU               | 0S-09       | 0S-09       | 0S-09              | US-09              | 0S-09              | 0S-09              | 0S-09              | 0S-09              | 0S-09              | ns-o              | ns-o               | US-1               |
| DB                            | 0                  | σ           | σ           | σ                  | σ                  | Φ                  | σ                  | σ                  | σ                  | σ                  | 10                | 11                 | 13                 |
| *<br>Query<br>Match Length DB | 158                | 158         | 158         | 158                | 158                | 158                | 158                | 158                | 158                | 158                | 158               | 158                | 158                |
| &<br>Query<br>Match           | 100.0              | 100.0       | 100.0       | 100.0              | 100.0              | 100.0              | 100.0              | 100.0              | 100.0              | 100.0              | 100.0             | 100.0              | 100.0              |
| Score                         | 878                | 878         | 878         | 878                | 878                | 878                | 878                | 878                | 878                | 878                | 878               | 878                | 878                |
| Result<br>No.                 | н                  | 7           | ٣           | 4                  | 'n                 | φ                  | 7                  | ۵                  | 6                  | 10                 | 11                | 12                 | 13                 |

| 22022                      | sequence 111, App<br>Sequence 347, App<br>Sequence 138, App<br>Sequence 781, App<br>Sequence 861, App<br>Sequence 1200, App | Sequence 93, Appl<br>Sequence 105, App<br>Sequence 2, Appli<br>Sequence 6394, Ap<br>Sequence 753, App<br>Sequence 753, App | 30,43  | Sequence 2, Appli<br>Sequence 38, Appl<br>Sequence 3, Appli<br>Sequence 1, Appli<br>Sequence 109, App<br>Sequence 109, App |
|----------------------------|---|--|--|--|
|                            | US-10-157-031-11<br>US-10-205-823-34<br>US-10-295-027-78<br>US-10-295-027-86<br>US-10-295-027-86                            | -80<br>-80<br>-80<br>-80<br>-80  | US-10-107-782-<br>US-10-028-248A<br>US-10-107-782-<br>US-09-997-003-<br>US-09-997-003-<br>US-10-734-564-<br>US-09-925-301-1  | US-10-73<br>US-10-02<br>US-10-10<br>US-10-31<br>US-10-43<br>US-10-02   |
| HHHHA                      | 58 14 15 15 15 15 15 15 15 15 15 15 15 15 15  |  | 174 15<br>175 15<br>175 15<br>166 10<br>166 10<br>174 9  | 66 16<br>75 15<br>75 15<br>75 14<br>75 15<br>75 15   |
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## ALIGNMENTS

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Gaps
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APPLICANT: Smith, Carole Lynn
APPLICANT: King, Gordon E.
APPLICANT: King, Gordon E.
APPLICANT: King, Gordon E.
APPLICANT: Clapper, Jonathan D.
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C13
CURRENT APPLICATION NUMBER: US/09/922,217
CURRENT FILING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 1124
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 878; DB 9; Length 158; Best Local Similarity 100.0%; Pred. No. 3.3e-82; Matches 158; Conservative 0; Mismatches 0; Indels 0
                           Sequence 1070, Application US/09922217
Patent No. US20020076414A1
                                                                                                                      APPLICANT: Xu, Jiangchun
APPLICANT: Lodes, Michael J.
APPLICANT: Secrist, Heather
APPLICANT: Benson, Darin R.
APPLICANT: Meagher, Madeleine Joy
APPLICANT: Stolk, John A.
APPLICANT: Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens
US-09-922-217-1070
US-09-922-217-1070
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1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS 60

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                                                                                                                                         61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
                                                                                 61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Lodges, Michael J.
APPLICANT: Secrist, Heather
APPLICANT: Secrist, Heather
APPLICANT: Secrist, Heather
APPLICANT: Beneson, Darin R.
APPLICANT: Headeline Joy
APPLICANT: Siang, Yuqiu
APPLICANT: Jiang, Yuqiu
APPLICANT: Wang, Tongtong
APPLICANT: Wang, Anjun
APPLICANT: Wang, Wa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 878; DB 9; Length 158; Best Local Similarity 100.0%; Pred. No. 3.3e-82; Matches 158; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                               121 KSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYRP 158
                                                                                                                                                                                                                                                                                                                  121 KSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 KSMGGUKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
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Sequence 1078, Application US/0992217
GENERAL INFORMATION:
APPLICANT: Lodges, Michael J.
APPLICANT: Secrist, Heather;
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
APPLICANT: Stolk, John A.
APPLICANT: Wang, Tongtong
APPLICANT: Stolk, John A.
APPLICANT: Smith, Carole Lynn
APPLICANT: Smith, Carole Lynn
APPLICANT: Smith, Carole Lynn
APPLICANT: Smith, Carole Lynn
APPLICANT: King, Gordon E.
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; Patent No. US20020076414A1

; GENERAL INFORMATION:

APPLICANT: Xu, Jiangchun
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; ORGANISM: Homo sapiens
US-09-922-217-1077
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LENGTH: 158
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APPLICANT: Wang, Aijun
APPLICANT: Clapper, Jonathan D.
ITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C13
CURRENT PELICATION NUMBER: US/09/922,217
CURRENT FILING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 1124
SOFTWARE: PaetSEQ for Windows Version 4.0
SORTWARE: PaetSEQ for Windows Version 4.0
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APPLICANT: Smith, Carole Lynn
APPLICANT: Smith, Carole Lynn
APPLICANT: Mang, Aijun
APPLICANT: Mang, Aijun
APPLICANT: Mang, Aijun
APPLICANT: Mang, Aijun
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
TILE REPERBNCE: 210.121.471C13
CURRENT FILING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 1124
SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 158;
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100.0%; Score 878; DB 9; Length 158;
Best Local Similarity 100.0%; Pred. No. 3.38-82;
Matches 158; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 1079, Application US/09922217; Patent No. US20020076414A1; GENERAL INFORMATION:
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Benson, Darin R.
Meagher, Madeleine Joy
Stolk, John A.
Wang, Tongtong
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US-09-922-217-1078
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US-09-922-217-1079
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APPLICANT:
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Query Match
Best Local Similarity 100.0
Matches 158; Conservative
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Matches 158; Conservative
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CRGANISM: Homo sapiens
US-09-833-263-1077
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US-09-833-263-1070
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Sequence 1070, Application US/09833263

Patent No. US20020110547A1

GENERAL INFORMATION:

APPLICANT: Wang, Aijun

APPLICANT: Glapper, Jonathan D.

APPLICANT: Stolk, John A.

TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND

TITLE OF INVENTION: COMPOUNDS FOR COLON CANCER AND METHODS FOR THEIR USE

FILE REPRENCE: 210121.471C12

CURRENT FILING DATE: 2001-04-10

NUMBER OF SEQ ID NOS: 1093

SEQ ID NO 1070

LENGTH: 158
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APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Michael J.
APPLICANT: Secriet, Heacher
APPLICANT: Berist, Heacher
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
APPLICANT: Magher, Madeleine Joy
APPLICANT: Story
APPLICANT: Story
APPLICANT: Ship, Carole Lynn
APPLICANT: Ship, Carole Lynn
APPLICANT: Ship, Gordon E.
APPLICANT: Mang, Aijun
APPLICANT: Mang, Aijun
APPLICANT: Mang, Aijun
APPLICANT: Alapper, Jonathan D.
APPLICANT: Alapper, Jonathan D.
APPLICANT: Applex Jonathan D.
APPLICA
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100.0%; Score 878; DB 9;
Best Local Similarity 100.0%; Pred. No. 3.3e-82;
Matches 158; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                           Sequence 1080, Application US/09922217
Patent No. US20020076414A1
GENERAL INFORMATION:
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; ORGANISM: Homo sapiens
US-09-922-217-1080
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APPLICANT: Clapper, Jonathan D.
APPLICANT: Stolk, John A.
APPLICANT: Stolk, John A.
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
TITLE OF INVENTION: DAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
TITLE PEFERENCE: 210121.471C12
CURRENT APPLICATION NUMBER: US/09/833,263
CURRENT FILING DATE: 2001-04-10
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FastSEQ for Windows Version 3.0
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Sequence 1078, Application US/09833263
Fatent No. US20020110547A1
GENERAL INFORMATION:
APPLICANT: Wang, Aijun
APPLICANT: Clapper, Jonathan D.
APPLICANT: Meagher, Madeleine J.
APPLICANT: Meagher, Madeleine J.
APPLICANT: Meagher, Madeleine J.
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C12
CURRENT APPLICATION NUMBER: US/09/833,263
CURRENT FILING DATE: 2001-04-10
NUMBER OF SEQ ID NOS: 1093
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      Length 158;
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100.0%; Score 878; DB 9;
100.0%; Pred. No. 3.3e-82;
ive 0; Mismatches 0;
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; Patent No. US20020110547A1
; GENERAL INFORMATION:
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; Sequence 1079, Application US/09833263
; Sequence 1079, Application US/09833263
; Fatent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Meagher, Madeleine J.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: COMPOUNDS FOR COLON CANCER AND METHODS FOR THEIR USE
; FILE REPERENCE: 210121-417C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NOWHER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; TENGTON: 1099
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100.0%; Score 878; DB 9; Length 158;
Best Local Similarity 100.0%; Pred. No. 3.3e-82;
Matches 158; Conservative 0; Mismatches 0; Indels
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100.0%; Score 878; DB 9; Length 158;
Best Local Similarity 100.0%; Pred. No. 3.3e-82;
Matches 158; Conservative 0; Mismatches 0; Indels
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US-009-833-263-1080
US-009-833-263-1080
; Sequence 1080, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wall
; APPLICANT: Stolk, John A.
; APPLICANT: Stolk, John A.
; APPLICANT: Stolk, John A.
; APPLICANT: Macagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
TYPE: PRT
CORGANISM: Homo sapiens
US-09-833-263-1079
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TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE FILE REFERENCE: 2.0121.471C12
CURRENT APPLICATION NUMBER: US/09/833,263
CURRENT FILING DATE: 2.001-04-1.0
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FABELSEQ for Windows Version 3.0
SEQ ID NO 1080
LENGTH: 158
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100.0%; Score 878; DB 10; Length 158;
Best Local Similarity 100.0%; Pred. No. 3.3e-82;
Matches 158; Conservative 0; Mismatches 0 Indels 0,
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US-03-525-041-2
Sequence 2, Application US/09525041
Publication No. US20030158098A1
GENERAL INFORMATION:
APPLICANT: SOPPER et al.
TITLE OF INVENTION: Colon Specific Gene and Protein
FILLE REFERENCE: PRIPAGE: PRIPAGE:
CURRENT PELLICATION NUMBER: US/09/525,041
CURRENT FILLING DATE: 1998-09-29
FRIOR FILLING DATE: 1998-09-29
FRIOR PELICATION NUMBER: US 08/468,413
FRIOR APPLICATION NUMBER: US 08/468,413
FRIOR PELING DATE: 1998-09-29
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.0
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; Pred. No. 3.3e-82;
0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 158; Conservative 0
                                                                                                                                                                                                                                  ; TYPE: PRT 
; ORGANISM: Homo sapiens
US-09-833-263-1080
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COGANISM: Homo sapiens
US-09-525-041-2
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US-09-969-034-4471
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RESULT 15
US-10-025-380-1078
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LENGTH: 158
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CURRENT APPLICATION NUMBER: US/10/025,380
CURRENT FILING DATE: 2001-12-19
NUMBER OF SEQ ID NOS: 1129
SOFTWARE: FastSEQ for Mindows Version 4.0
                                                                                            APPLICANT: Dwivedi, Poornima
APPLICANT: Thiagalingam, Arunthathi
APPLICANT: Thiagalingam, Arunthathi
APPLICANT: Thiagalingam, Arunthathi
APPLICANT: Thiagalingam, Arunthathi
APPLICANT: Lewis, Marcia E.
TITLE OF INVENTION: Nucleic Acid Sequences Differentially
TITLE OF INVENTION: Expressed in Cancer Tissue
FILE REFERENCE: 1657/1032
CURRENT FILING DATE: 2001-10-02
RIOR APPLICATION NUMBER: 60/237,271
PRIOR APPLICATION NUMBER: 60/237,271
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 4494
SOFTWARE: FRESEEQ for Windows Version 4.0
SEQ ID NO 4471
LENGTH: 158
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Publication No. US20020182191A1
GENERAL INFORMATION:
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APPLICANT: Lodes, Michael J.
APPLICANT: Benson, Heather
APPLICANT: Benson, Darin R.
APPLICANT: Meagher, Madeleine Joy
APPLICANT: Stolk, John A.
APPLICANT: Wang, Tongtong
Burgess, Christopher C.
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                        Astle, Jon H.
Carroll, Eddie III
Catino, Theodore J.
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Smith, Carole L.
King, Gordon E.
Wang, Aijun
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; ORGANISM: Homo sapiens
US-10-025-380-1070
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61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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                   Length 158;
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TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OP COLON CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C14
CURRENT APPLICATION NUMBER: US/10/025,380
CURRENT FILING DATE: 2001-12-19
NUMBER OF SEQ ID NOS: 1129
SOFTWARE: FastSEQ for Windows Version 4.0
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100.0%; Pred. No. 3.3e-82;
tive 0; Mismatches 0;
                   Score 878; DB 13;
Pred. No. 3.3e-82;
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Sequence 1077, Application US/10025380 Publication No. US20020182191A1 GENERAL INFORMATION:
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APPLICANT: Lodes, Michael J.
APPLICANT: Beerist, Heather
APPLICANT: Benson, Darin R.
APPLICANT: Kagher, Madeleine Joy
APPLICANT: Stolk, John A.
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Skeiky, Yasir A. W.
Fanger, Gary R.
Vedvick Thomas S.
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Smith, Carole L.
King, Gordon E.
Wang, Aijun
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Best Local Similarity 100.
Matches 158; Conservative
                   Query Match
Best Local Similarity 100.
Matches 158; Conservative
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1 MASRSWRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQS 60
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APPLICANT: No. Jiangchun
APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Michael J.
APPLICANT: Gerrist, Madeleine Joy
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
APPLICANT: Mang, Tongtong
APPLICANT: Stolk, John A.
APPLICANT: Jiang, Yuqiu
APPLICANT: Mang, Tongtong
APPLICANT: Mang, Araleh
APPLICANT: Clapper, Jonathan D.
APPLICANT: Staleky, Yasir A. W.
APPLICANT: Staleky, Yasir A. W.
APPLICANT: Carter, Darrick
APPLICANT: Carter, Darrick
APPLICANT: Oxforton S.
APPLICANT: Oxforton S.
APPLICANT: Oxforton S.
APPLICANT: Jonathan D.
APPLICANT: Carter, Darrick
APPLICANT: Stales, Jonathan D.
APPLICANT: Carter, Darrick
APPLICANT: Stales, Jonathan S.
APPLICANT: Sanger, Gary R. W.
APPLICANT: Sanger, Gary R. W.
APPLICANT: Sanger, Gary R. W.
APPLICANT: Jonathan S.
APPLICANT: Jonathan S.
APPLICANT: Sanger, Gary R. W.
APPLICANT: Jonathan S.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 878; DB 13; Length 158; Best Local Similarity 100.0%; Pred. No. 3.3e-82; Matches 158; Conservative 0; Mismatches 0; Indels 0.
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Search completed: March 3, 2005, 08:06:40 Job time: 133 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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March 3, 2005, 07:50:03 ; Search time 39 Seconds (without alignments) 389.801 Million cell updates/sec Run on:

1 MASRSMRLLLLLSCLAKTGV.....LTWSSNECNKRQHFLCKYRP 158 US-10-099-791E-2 878 Title: Perfect score: Sequence:

Scoring table:

283416 segs, 96216763 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result | 9 G     |        |    | SOUTHERNESS |                    |
|--------|---------|--------|----|-------------|--------------------|
| Score  |         | Length | DB | ID          | Description        |
| 254.   | . 29.   | 165    | 7  | 4           | 7, r               |
| 254.5  | 29.     | 16     | N  | A28351      | crea               |
| 241.   | 3 27.   | 14     | ~  | S78596      | ovocleidin - chick |
| 240    | 0 27.3  | 166    | Н  | RGHU1B      | regenerating islet |
| 236.   |         | 17     | ~  | B47148      | reg II, regenerati |
| 236.5  |         |        | ~  | 183377      | regenerating prote |
| 23     |         |        | N  | A38609      | lectin, galactose- |
| 23     |         |        | ~  | S54979      | pancreatitis-assoc |
| 23     |         |        | N  | A37194      | pancreatic thread  |
| 228.   |         |        | Н  | A48689      | pancreatitis-assoc |
| 225.   |         |        | -  | RGHU1A      | regenerating islet |
| 224    |         |        | N  | A45751      | pancreatic stone p |
| 222.5  |         | 172    | N  | S32489      | lectin - Iberian r |
| 22     |         |        | 7  | A49616      | pancreatitis-assoc |
| 206.   |         |        | ~  | JC7134      | agkisacutacin alph |
| 203.   |         |        | ~  | JC5058      | bitiscetin alpha c |
| 203    |         |        | ~  | A41719      | pancreatic stone p |
| 202.   |         |        | 7  | JC2415      | echicetin beta cha |
| 202.   |         |        | 7  | JC4690      | coagulation factor |
| 200.   |         |        | ~  | JC5059      | bitiscetin beta ch |
| 196.   |         |        | ~  | JC7105      | aggretin beta chai |
| 196.   |         |        | 7  | JC4691      | coagulation factor |
| 19     |         |        | 7  | S29822      | pancreatitis-assoc |
| 19     |         |        | ~  | T46256      | brevican - human ( |
| 19     |         |        | ~  | A54423      | brevican precursor |
| 19     |         | 88     | 7  | S57653      | brevican precursor |
| 18     | 89 21.5 | -      | 7  | A47267      | botrocetin alpha c |
| 185.   | 21.     | 12     | ~  | B47267      | botrocetin beta ch |
| 185.   | ~       | 129    | 7  | JC4329      | coagulation factor |
|        |         |        |    |             |                    |

Description brotein precursor - rat

NyAlternate names: lithostathine
C;Species: Natus norvegicus (Norvegicus (Nor

| •   |  |
|---|--|
| brevican precursor<br>neurocan precursor<br>agkisacutacin beta<br>asialoglycoprotein<br>aggretin alpha cha<br>hepatic lectin HI<br>chondroitin sulfat | versican precursor<br>versican precursor<br>asialoglycoprotein<br>lectin BRA3-1 prec<br>lectin BRA3-2 prec<br>versican precursor<br>versican precursor<br>coagulation factor |
| \$49126<br>\$28764<br>\$27135<br>\$13165<br>\$C7027<br>\$A7171  | A55535<br>A60979<br>LNHUZA<br>LNRC3<br>LNRC3<br>T42374<br>T42372<br>B42972   |
| 00000100  | 2222111111   |
| 883<br>1257<br>146<br>301<br>291<br>3562  | 23397<br>23997<br>3411<br>162<br>162<br>3381<br>123  |
| 221.1<br>221.1<br>200.8<br>200.6  | 444.000000<br>444.0000000  |
| 185<br>184.5<br>182.5<br>182<br>181<br>181  | 179<br>178.5<br>177.5<br>177.5<br>177.1  |
| 0 1 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8   | 0 C C C C C C C C C C C C C C C C C C C  |
|   |  |

# ALIGNMENTS

| A47148      |   |
|-------------|---|
| reg I,      | reg 1, regenerating islet cells - mouse   |
| C;Speci     | es: Mus musculus (house mouse)  |
| C;Date:     | C;Date: 03-May-1994 #Bequence_revision 03-May-1994 #text_change 09-Ju1-2004   |
| C; Acces    | B10n: A4/148  |
| R; Unno,    | R;Unno, M.; Yonekura, H.; Nakagawara, K.; watanabe, T.; Miyashita, H.; Moriizumi, S.; Oke                               |
| J. Biol     | . Chem. 268, 15974-15982, 1993  |
| A; Title    | A, Title: Structure, chromosomal localization, and expression of mouse reg genes, reg I ar                              |
| A;Refer     | ence number: A47148; MUID:93340209; PMID:8340418  |
| A; Acces    | A;Accession: A47148   |
| A;Statu     | A;Status: preliminary   |
| A; Molec    | A; Molecule type: DNA   |
| A, Resid    | A; Residues: 1-165 <unn></unn>  |
| A; Cross    | A; Cross-references: UNIPROT: P43137; GB: D14010; NID: 9391771; PIDN: BAA03111.1; PID: 9391772                          |
| C, Genetics | 108.  |
| A; Intro    | ns: 21/1; 60/3; 106/3; 144/1  |
| C.Super     | C;Superfamily: tetranectin; C-type lectin homology  |
| F;35-16     | F;35-161/Domain: C-type lectin homology <lch></lch>   |
| F;35-46     | ,63-161,136-153/Disulfide bonds: #status predicted  |
| Query       | Query Match 29.0%; Score 254.5; DB 2; Length 165; .   |
| Matches     | DOCAL SAMINATELY STILY, FIGU. NO. 3.25-10, Indels 29; Gaps 7; es 52; Conservative 35; Mismatches 51; Indels 29; Gaps 7; |
| ò           | 10 LLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDA 54   |
| 4           |   |
| 2           | TERSON  |
| ò           | 55 ELECOSYGNGAHLASILSLKEASTIAEYISGYORSOPIMIGLHDPOKROOWOMIDGAM 112   |
| QQ          | 60 DLFCQNWNSG-YLVSVLSQAEGNFVASLIKESGTTDAN-VWTGLHDPKRNRRWHWSSGSL 117   |
| ò           | H-SGKSMGGNK-HC  |
| į           |   |
| qq          | IIB FLIKSWATGSPNSSNKGICVSLISNTGIKKWKDUNCDAQISFVCKFN 164   |

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Query Match
Best Local Similarity
Matches 46; Conserv
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Best Local S
Matches 46
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A,Cross-references: UNIPROT: P10758; GB:M18962; NID:g206604; PIDN:AAA42028.1; PID:g206605 R;Rouquier, S.; Verdier, J.W.; Iovanna, J.; Dagorn, J.C.; Giorgi, D.
J. Biol. Chem. 266, 786-791, 1991
A,Title: Rat pancreatic stone protein messenger RNA. Abundant expression in mature exoct A,Reference number: A39081; MUID:91093273; PMID:1985964
A,Accession: A39081
A,Status: preliminary
A,Residues: 1-165 KROU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:L07512; NID:g393208; PIDN:AAA41533.1; PID:g393209
C;Comment: This protein is found in pancreatic calculi of mammals. A peptide bond betwee
rotein into an insoluble protein at a neutral pH of 5.5 to 7.5.
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:M62930; GB:J05722; NID:g206462; PIDN:AAA41974.1; PID:g206463
R;Adrich, Z.; De Caro, A.M.; Guidoni, A.A.; Woudstra, M.E.; Rovery, M.
Comp. Biochem. Physiol. B 93, 793-797, 1989
A;Tille: Characterization in rat pancreatic juice of a protein homologous to the human
A;Reference number: PL0147; MUID:90031455; PMID:2680252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52 SDAELECQSYGNGAHLASILSLKEASTIAEYI -- SGYQRSQPIWIGLHDPQKRQQWQWID 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 RILLILISCLAKTGVLGDIIMRPS------CAPGWFYHKSNCYGYFRKLRNW 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cysocies: Gallus gallus (chicken)
Cysocies: Gallus gallus (chicken)
Cysocies: Gallus gallus (chicken)
Cybate: 24-Oct-1998 #sequence_revision 24-Oct-1998 #text_change 20-Sep-1999
CyAccession: 878596
CyAccession: 878596
CyAccession: 878596
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AyAccession: 878596
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         110 GAMYLYRSW-SGKSMGGNK-HCAEMSSNNNFLTWSSNECNKROHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ovocleidin - chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 52
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A; Molecule type: DNA
A; Residues: 1166 < CAR>
A; Residues: 1166 < CAR>
A; Cross-references: UNIPROT: P48304; GB: L08010; NID: g307368; PIDN: AAA18204.1; PID: g487726
A; Cross-references: UNIPROT: P48304; GB: L08010; NID: g307368; PIDN: AAA18204.1; PID: g487726
A; Note: this gene appears to be expressed in pancreas and liver
R; Morrisumi, S.; Watenabe, T.; Unno, M.; Nagawara, K.; Suzuki, Y.; Miyashita, H.; Yone}
Biochim. Biophys. Acta 1217, 199-202, 1994
A; Title: Isolation, structural determination and expression of a novel reg gene, human re
A; Reference number: S42729; MUID: 94153997; PMID: 8110835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A/Cross-references: GDB:342079
A/Rosp position: 2012-2012
A/Introns: 22/1; 16/13: 107/3; 145/1
C/Superfamily: tetranectin; C-type lectin homology
L/Superfamily: tetranectin; C-type lectin homology
C/Seywords: Glycoprotein; lectin; pancreas; pyroglutamic acid
C/Seywords: Glycoprotein; lectin; pancreas; pyroglutamic acid
F)1-22/Domain: signal sequence #status predicted <MGT>
F)3-166/Product: regenerating islet lectin lbeta #status predicted <MAT>
F)3-166/Product: pancreatic stone protein #status predicted <MAT>
F)3-166/Product: pancreatic stone protein #status predicted <MAT>
F)3-166/Product: pancreatic stone protein #status predicted <MAT>
F)3-167/Domain: C-type lectin homology <LCH*
F)3-167/Domain: C-type lectin homology <LCH*
F)3-17/Indiang site: achohydrate (Thr) (covalent) #status predicted
F)3-3-34/Cladavage site: Arg-11e (trypsin) #status predicted
F)36-47,64-162,137-154/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;cross-references: GB:D17291; NID:g474307; PIDN:BAA04124.1; PID:g474308
C;Comment: This protein is found in pancreatic calculi of mammals. The tryptic-like clear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Noticerating islet lectin 1-beta precursor - human
Nichernate names: regarelated protein; reg1-beta protein
Nichernate names: reg-related protein; reg1-beta protein
Nichernate names: reg-related protein; reg1-beta protein
Nichernate names: reg-related protein (PSP)
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 22-Nov-1993 #sequence revision 03-Aug-1995 #text_change 09-Jul-2004
C; Date: 22-Nov-1993 #sequence revision 03-Aug-1995 #text_change 09-Jul-2004
R; Bartoli, C.; Gharib, B.; Glorgi, D.; Sansonetti, A.; Dagorn, J.C.; Berge-Lefranc, J.L.
PEBS Lett. 327, 289-293, 1993
A; Title: A gene homologous to the reg gene is expressed in the human pancreas.
A; Reference number: 834591; MUID:93351647; PMID:8348956
A; Accession: 834591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84 --SGYQRSQPIWIGLHDPQXRQQWQWIDGAMYLYRSW--SGKSMGGNKHCAEMSSNNNFL 139
                                                                                                                                                                                       83
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A;Residues: 1-166 cMOR>
A;Cross-references: GB:D16816; NID:g474305; PIDN:BAA04091.1; PID:g474306
A;Accession: A44712
A;Molecule type: DNA
A;Residues: 1-166 cMO2>
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27.5%; Score 241.5; DB 2
33.8%; Pred. No. 1.5e-16;
tive 23; Mismatches 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140 TWSSNECNKROHFLCK 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           124 SWAARPCTERNAFVCK 139
                                                                                              46; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C,Genetics:
A,Gene: GDB:REG1B; REG1
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pancreatitis-associated protein PAP-3 - rat
C;Species: Rattus norregicus (Norway rat)
C;Date: 23-Aug-1995 #sequence_revision 19-Oct-1995 #text_change 09-Jul-2004
C;Accession: S54979; S43438
R;Dusetti, N.J.; Frigerio, J.M.; Szpirer, C.; Dagorn, J.C.; Iovanna, J.L.
Biochem. J. 307, 9-16, 1995
A;Title: Cloning, expression and chromosomal localization of the rat pancreatitis-associally. Reference number: S54979; MUID:95234061; PMID:7717998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,Residues: 1-174 <DUS>
A,COSS-references: UNIPROT:P42854; EMBL:U09193; NID:9483931; PIDN:AAA79231.1; PID:948393;
R,Frigerio, J.M.; Dusetti, N.J.; Garrido, P.; Dagorn, J.C.; Iovanna, J.L.
Biochim. Biophys. Acta 1216, 329-331, 1993
A,7tile: The pancreatitis associated protein III (PAP III), a new member of the PAP gene A,Reference number: S43438; MUID:94060113; PMID:8241280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R'Hirabayashi, J.; Kusunoki, T.; Kasai, K.
V. Biol. Chem. 266, 2320-2326, 1991
A;Title: Complete primary structure of a galactose-specific lectin from the venom of the
A;Reference number: A38609; MUID:91115849; PMID:1989986
                                                                                                                                                                    86 YORSOPIWIGLHDPOKROO-----WOWIDGAMYLYRSWSG--KSMGGNKHCAEMSSNNNF 138
                                                                                                                                                                                                       89 SQP-IWIGLHDPQKRQQWQWIDGAMYLYRSWSGKS---MGGNKHCAEMSSNNNFLTWSSN 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 GOENVWIGLRDKKKDPSWEWTDRSCTDYLTWDKNOPDHYONKEFCVELVSLTGYRLWNDQ 121
                                                                                                            94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29 SCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISGYQR 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lectin, galactose-specific - western diamondback rattlesnake
C;Species: Crotalus atrox (western diamondback rattlesnake)
C;Date: 23-Aug-1991 #sequence_revision 23-Aug-1991 #text_change 09-Jul-2004
C;Accession: A38609
                                                                                     27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:P21963
C;Superfamily: tetranectin; C-type lectin homology
F;3-131/Domain: C-type lectin homology &LGH>
F;3-14,31-131,106-122/Disnlfide bonds: #status predicted
26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 26.5%; Score 233; DB 2; Similarity 34.4%; Pred. No. 9.8e-16; 45; Conservative 18; Mismatches 64.
  Mismatches
                                                                                                                                                                                                                                                                                                                            155 LKWGDHHCDVELPFVCKFK 173
                                                                                                                                                                                                                                                                                   LIWSSNECNKRQHFLCKYR 157
25;
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 VCESKDAFLCQ 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145 ECNKROHFLCK 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: A38609
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-135 < HIR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 45; Conserva
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A;Molecule type: DNA
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  49;
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  Matches
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R;Unno, M.; Yonekura, H.; Nakagawara, K.; Watanabe, T.; Miyashita, H.; Moriizumi, S.; Ok
Biol. Chem. 268, 15974-15982, 1993
A;Title: Structure, chromosomal localization, and expression of mouse reg genes, reg I a
A;Reference number: A47148; MUID:93340209; PMID:8340418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Accession: 160296; 183377
R;Suzuki, Y.; Yonekura, H.; Watanabe, T.; Unno, M.; Moriizumi, S.; Miyashita, H.; Okamot Gene 144, 315-316, 1994
A;Title: Structure and expression of a novel rat RegIII gene.
A;Rteference number: 160296; MUID:94314238; PMID:8039722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cross-references: UNIPROT:Q08731; GB:D14011; NID:g391773; PIDN:BAA03112.1; PID:g391774
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48 LRNWSDAELECQSYGNGAHLASILSLKEASTIAEYI--SGYQRSQPIWIGLHDPQKRQQW 105
  STDDSNVWIGLHDPKKNRRWHWSSGSLVSYKSWDTGSPSSANAGYCASLTSCSGFKKWKD 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MASRSMRLLLLLSCLAKTGVLGDII------MRPSCAPGWFYHKSNCYGYFRK 47
                                                                                                                                                                                                                                                   reg II, regenerating islet cells - mouse
C;Species: Mus musculus (house mouse)
C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                regenerating protein III (reg III) - rat
C;Species: Rattus norvegicus (Norway rat)
C;Pate: 29-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QWIDGAMYLYRSWS--GKSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cross-references: GB:D26078; NID:g471159; PIDN:BAA05071.1; PID:g471160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 26.9%; Score 236.5; DB 2; Length 173; Local Similarity 28.7%; Pred. No. 5.8e-16; nes 50; Conservative 33; Mismatches 72; Indels 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Introns: 22/1; 68/3; 114/3; 152/1
Csuperfamily: tetranectin: C-type lectin homology
F;41-169/Domain: C-type lectin homology <LCH>
F;43-54,71-169,144-161/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26.9%; Score 236.5; DB 2; 35.3%; Pred. No. 5.8e-16;
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Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary; translated from GB/EMBL/DDBJ
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Superfamily: tetranectin; C-type lectin homology
39-170/Domain: C-type lectin homology <LCH>
                                                                                             | |: |:||:
ESCEKKFSFVCKFK 165
                                                          144 NECNKRQHFLCKYR 157
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Residues: 1-174 <RE2>
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Status: preliminary
Molecule type: DNA
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Regine Regine islet lectin 1-alpha precursor [validated] - human Naliterate names: lithostathing; pancreatic thread protein (PTD); reg I protein; reg1-al Nicottains; pancreatic stone protein (PED) and the space of the space of the pancreatic stone protein (PED) and the space of the space of
C; Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C; Accession: A48689
R; Frigerio, J.M.; Dusetti, N.J; Keim, V.; Dagorn, J.C.; Iovanna, J.L.
Biochemistry 32, 9236-9241, 1993
A; Title: Identification of a second rat pancreatitis-associated protein. Messenger RNA c]
A; Accession: A48689
A; Accession: A48689
A; Status: preliminary
A; Molecule type: mRNA
A; Mesidues: 1-174 ERI>
A; Csi NINROT: P35231; GB: L10229; NID: G409014; PIDN: AA02980.1; PID: G409015
C; Superfamily: tetranectin; C-type lectin homology
F; 39-170/Domain: C-type lectin homology < LCH>
F; 39-50, 67-170; 145-162/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86 YQRSQPIWIGLHDPQKRQQ-----WQWIDGAMYLYRSWSG--KSMGGNKHCAEMSSNNNF 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECOSYGNGAHLASILSLKEASTIAEYISG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 174;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26.0%; Score 228.5; DB 1
34.5%; Pred. No. 3.6e-15;
tive 25; Mismatches 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         155 LKWGDHHCDVELPFVCKFK 173
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nes 48; Conservative
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Best Local S
Matches 48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Advined banceatic thread protein precursor - bovine (Species: Bos primiquents taurus (cattle) (C.) Date: 31-Jan.1992 #sequence_revision 31-Jan.1992 #text_change 09-Jul-2004 (C.) Date: 31-Jan.1992 #sequence_revision 31-Jan.1992 #text_change 09-Jul-2004 (C.) Date: 31-Jan.1992 #sequence_revision 31-Jan.1992 #text_change 09-Jul-2004 (C.) Date: 31-Jan.1992 #squence_revision 31-Jan.1992 #squence_revision 31-Jan.1992 #text_change 09-Jul-2004 (C.) Date: 31-Jan.1992 #squence_revision 31-Jan.1992 #squence_revision of an exocrine pancreatic protein in Alzheimer's disease an A, Reference number: A37194; MUID:90368981; PMID:2394826 A, A, Rolecule type: MRNA A, Residues: 1-175 cbEL.
A, Rocession: A37194
A, Residues: 1-175 cbEL.
A, Residues: 1-175 cbEL.
A, Reference number: A53897; MUID:91197388; PMID:2085387
A, Reference number: A53897; MUID:91197388; PMID:2085387
A, Residues: 38-138;141-175 ccAl>
A, Residues: 38-138;141-175 ccAl>
A, Residues: 38-138;141-175 ccAl>
C, Comment: The purified protein undergoes a reversible globule-fibril transformation and C, Superfamily: tetranectin; C-type lectin homology clean contain chain A #status experimental call>
F, 40-171/Domain: C-type lectin homology clean chain B #status experimental call>
F, 11-175/Product: pancreatic thread protein chain B #status experimental
               A,Residues: 1-174 <FRI>A,Cross-references: GB:L20869; GB:S67496; NID:g463279; PIDN:AAA1809.1; PID:g463280 A;Cross-references: GB:L20869; GB:S57496; NID:g463279; PIDN:AAA1809.1; PID:g463280 A;Introns: 26/1; 65/3; 111/3; 153/1 C;Superfamily: tetranectin; C-type lectin homology F;40-170/Domain: C-type lectin homology <CAUTH ACTION OF ACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SYGNGAHLASILSLKEASTIAEYISGYORSQ-PIWIGLHDPOKROO-----WQWIDGAMY 113
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                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                      14;
                                                                                                                                                                                                                                                                                                                            Query Match 26.3%; Score 231; DB 2; Length 174; Best Local Similarity 32.4%; Pred. No. 2e-15; Matches 55; Conservative 28; Mismatches 73; Indels 1
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Similarity 30.9%; Pred. No. 2e-15;
51; Conservative 30; Mismatches 62; Indels 3
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C;Species: Rattus norvegicus (Norway rat)
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51;
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Best Local S
Matches 51
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Denorgatitis_associated protein precursor - human NyAlternate names: C-type lectin; pancreatic stone protein homolog HIP Cippedies: Homo sapiens (man) Cippedies: Homo sapiens (man) Cipate: 20-Feb-1995 #sequence revision 20-Feb-1995 #text_change 09-Jul-2004 Cipate: 20-Feb-1995 #sequence revision 20-Feb-1995 #text_change 09-Jul-2004 Cipate: 1995 #sequence revision 20-Feb-1995 #square 0.5 Frigorio, J.M.; Fox, M.F.; Swallow, D.M.; Dagorn, J.C.; Iovanna, J.L. Arritle: Molecular cloning, genomic organization, and chromosomal localization of the hum Arreference number: A49616; MUID:94245143; PMID:8188210
                                                                                                                    A;Residues: 1-166 <GIO>
A;Residues: 1-166 <GIO>
A;Cross-references: UNIPROT:P05451; GB:M27190; NID:g623412; PIDN:AAA60546.1; PID:g623413
C;Superfamily: tetranectin; C-type lectin homology cLChP P;36-162/Domain: C-type lectin homology cLCh>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:Q02988; EMBL:X69062; NID:g64257; PIDN:CAA48800.1; PID:g64258
C;Superfamily: tetranectin; C-type lectin homology
F;37-164/Domain: C-type lectin homology <LCH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTDDFN-VWIGLHDPKKNRRWHWSSGSLVSYKSWGIGAPSSVNPGYCVSLTSSTGFQKWK 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85 GYORSOPIWIGLHDPOKROOWOWIDGAMYLYRSW--SGKSMGGNKHCAEMSSNNNFLTWS 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 YPVVWVGGSDCYKDRSFVWTDGSQWDYQKWRQWEPSNTGGREPCIDF----NFVTPGLWN 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37 CTPGWDCHFNSYYKYIPNAKSWTDAEFYCQKLYPGAHLASIHSEDENDFLTEITFKNNSN 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Pleurodeles waltlii (Iberian ribbed newt)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: S3489; S28530
R;Tiffoche, C.; Chesnel, A.; Jego, P.; le Pennec, J.P.
Eur. J Biochem. 213, 901-907, 1993
A;Title: Isolation and characterization of a cDNA clone encoding a Pleurode.
A;Reference number: S32489; MUID:93279340; PMID:8504829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYI--S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | | | ::| | ::| | ::| | | ::| | | 33 RISCPEGTNAYRSYCYYFNEDRETWVDADLYCQNMNSG-NLVSVLTQAEGAFVASLIKES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90 QP-IWIGLHDPQKRQQWQWIDGAMYLY---RSWSGKSMGGNKHCAEMSSNNNFLT---WS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISGYQRS
                                                                                                                                                                                                                                                                                                                                        Length 166;
                                           A;Status: preliminary; not compared with conceptual translation A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                      58; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                    Score 224; DB 2;
Pred. No. 9.4e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .4e-14;
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34.3%; Pred. No. 1.4e
:ive 22; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                  45; Conservative 26; Mismatches
                                                                                                                                                                                                                                                                                                                                        25.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        143 SNECNKRQHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151 DVPCEDKFSFVCKFK 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      143 SNECNKRQHFLCKY 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |::: |:|||
153 DEHCDQKFPFICKY 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46; Conservative
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                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 45; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 46; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,Status: preliminary
A,Molecule type: mRNA
A,Residues: 1-172 <TIF>
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        A;Accession: A45751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Accession: A49616
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A/Crose-references: GDB:132455, OMIM:167770
A/Grose-references: GDB:132455, OMIM:167770
A/Grose-references: GDB:132455, OMIM:167770
A/Grose-references: GDB:132455, OMIM:167770
A/Grose-references: GDB:132455, OMIM:167770
A/Grose-reference: GLOB-reference: GLOB-re
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A;Molecule type: protein
A;Residues: 34-73,'X',75-87,'R',89-98 <MON>
C;Comment: This protein is found in pancreatic calculi of mammals. The tryptic-like clea
C;Comment: Intact regenerating islet lectin 1-alpha, lithostathine, inhibits the growth
                                               prd
                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Accession: S00113
A;Molecule type: protein
A;Molecule type: brotein
A;Residues: 34-166 cBls.
R;Residui, P.; Bonicel, J.; Rovery, M.; de Caro, A.
FEBS Lett. 216, 195-199, 1987
A;Title: Cleavage of the Arg-Ile bond in the native polypeptide chain of human pancreatian A;Reference number: S01471; MUID:87219142; PMID:3108036
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FEBS Lett. 229, 171-174, 1988
A;Title: The disulfide bridges of the immunoreactive forms of human pancreatic stone
A;Reference number: S02419; MUID:88152214; PMID:3345835
                                                                                                                                                                                                                                                                                                                                                                           form of human pancreatic
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R;Giorgi, D.; Bernard, J.P.; Rouquier, S.; Iovanna, J.; Sarles, H.; Dagorn, J.C.
J. Clin. Invest. 84, 100-106, 1989
A;Title: Secretory pancreatic stone protein messenger RNA. Nucleotide sequence and
A;Reference number: A45751; MUID:89292148; PMID:2525567
                                                                                                                                                               A; Molecule type: protein
A; Residues: 63-72;125-139;150-157;160-166 <ROU>
A; Note: disulfide bonds
R; de Caro, A.M.; Bonicel, J.J.; Rouimi, P.; de Caro, J.D.; Sarles, H.; Rovery, M.
Eur. J. Biochem. 168, 201-207, 1987
A; Title: Complete amino acid sequence of an immunoreactive form of human pancreat:
A; Reference number: S00113; MUID:88029417; PMID:3665916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AjMolecule type: protein
A;Residues: 33-48 <RO2>
KMontallot, G.; Bonicel, J.; Multigner, L.; Rovery, M.; Sarles, H.; De Caro, A.
Biochem. J. 238, 227-232, 1986
A;Title: Partial amino acid sequence of human pancreatic stone protein, a novel
A;Reference number: A25246; MUID:87099950; PMID:3341906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66 NWNSG-NLVSVLTQAEGAFVASLIKESGTDDFN-VWIGLHDPKKNRRWHWSSGSLVSYKS 123
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C;Species: Homo sapiens (man)
C;Date: 03-Jun-1993 #sequence_revision 03-Jun-1993 #text_change 09-Jul-2004
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                                                                                                                             A; Accession: S02419
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encoding a Pleurodeles lectin.

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us-10-099-791e-2.rpr

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C;Accession: JC7134; PC7037
R;Cheng X:, j Glan, Y: Liu, G. Lii, B.X.Y.; Zhang, M.; Liu, J.
B;Cheng X:, j Glan, Y: Liu, G.
B;Cheng X:, j Glan, Y: Liu, G.
B;Cheng X:, j Glan, Y: Liu, G.
B;Cheng B;Cheng X: Liu, G.
A;Title: Purification, characterization, and cDNA cloning of a new fibrinogenlytic venom A;Recession: JC7134; MUID:20025379; PMID:10558903
A;Accession: JC7134; MUID:20025379; PMID:10558903
A;Accession: JC7134
A;Moceoule type: mRNA
A;Residues: 1-152 - CHE-
A;Cross-references: UNIPROT:Q9DEF9; UNIPROT:Q91AM1; UNIPROT:Q8JIW0; GB:API76420
A;Accession: PC7037
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10 LLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 23.5%; Score 206.5; DB 2; Length 152; Best Local Similarity 31.3%; Pred. No. 4.5e-13; Matches 47; Conservative 26; Mismatches 64; Indels 13
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Job time : 40 secs
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A;Residues: 1-175 < DUGS-
A;Residues: 1-175 < DUGS-
A;Residues: 1-175 < DUGS-
Cancer Res 2. Christa L.; Simon, M.T.; Vernier, P.; Brechot, C.
Cancer Res 2. S. 2089-505. 1992
A;Title: A novel gene (HIP) activated in human primary liver cancer.
A;Reference number: A4491; MUID:92386513; PMID:1325291
A;Accession: A4491
A;Reference number: A4491; MUID:92386513; PMID:1325291
A;Reference number: A4491; MUID:92386513; PMID:1325291
A;Reference number: Cancer Res 2. Cancer Res 2. Cancer Res 3. Soft Residues: 1-175 CALS.
A;Reperimental source: hepatocellular carcinoma
A;Rocession: A4491
A;Reference number: Sepecific expression of CDNAs for the human and mouse homolog A;Reference number: Sepecific expression of CDNAs for the human and mouse homolog A;Reference number: Sepecific expression of CDNAs for the human and mouse homolog A;Reference number: Sepecific expression of CDNAs for the human and mouse homolog A;Reference number: Sepecific expression of CDNAs for the human and mouse homolog A;Reference number: Sepecific expression of CDNAs for Sepecific expression Sepecific expression Sepecific expression and chromosomal localization of a human gene (HIP/PAP) A;Reference number: Sepecific expression Sepecific expression: Sepecific expression in A;Reference number: Proprimary A;Reference nu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 SG-NLVSVLSGAEGSFVSSLVKSIGNSYSYVWIGLHDPTQGTEPNGEGWEWSSSDVMNYF 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 LLLSCL-AKTGVLGDIIMR--PS----CAPGWFYHKSNCYGYFRKLRNWSDAELECOSYG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agkisacutacin alpha chain precursor - sharp-nosed viper
NiAlternate names: fibrainogenitic venom protein
C:Species: Agkistrodon acutus (sharp-nosed viper)
C;Date: 04-Mar-2000 #sequence_revision 04-Mar-2000 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C.Superfamily: tetranectin; C-type lectin homology
C;Keywords: acute phase; extracellular protein; pancreas
F;1-26/Domain: signal sequence #status predicted <SIG>
F:27-175/Product: pancreatitis-associated protein #status predicted <MAT>
F;40-171/Domain: C-type lectin homology <LCH>
F;40-51,68-171,146-163/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule Vrpe: mRNA
A,Residues: 1-175 <RES>
A;Cross-references: GB:S51768; NID:g262368; PIDN:AAB24642.1; PID:g262369
C;Genetics: 108:PAP, HIP
A,Gross-references: GB:136839; OMIM:167805
A;Map position: 2p12-2p22
A;Introns: 26/1; 65/3; 111/3; 154/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
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25.2%; Score 221; DB 2; Length 175;
Best Local Similarity 32.7%; Pred. No. 26-14;
Matches 53; Conservative 29; Mismatches 64; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117 SW--SGKSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKY 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29; Mismatches
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69 64

Gaps

13;

1

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

March 3, 2005, 07:50:03; Search time 177 Seconds (without alignments) 457.110 Million cell updates/sec Run on:

US-10-099-791E-2 878 1 MASRSMRLLLLLSCLAKTGV......LTWSSNECNKRQHFLCKYRP 158 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table;

1612378 segs, 512079187 residues Searched:

1612378 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

| ;<br>;           | O. I    | -      | gs mus musculu | _      | x7 rattus norv | r7 homo sapien | 75 xenopus lae |        | 14 struthio ca | 00 anser anser | 37 mus musculu | 58 rattus norv | 15 struthio ca |            |        |        |            | s8 gallus gall | _          | •      | 19 bothrops ja | -          | 28 bothrops ja  | -      | inO bitis ariet | 63 crotalus at | 54 rattus norv |            | v9 agkistrodon  |            | 31 rattus norv | f4 mus musculu |
|------------------|---------|--------|----------------|--------|----------------|----------------|----------------|--------|----------------|----------------|----------------|----------------|----------------|------------|--------|--------|------------|----------------|------------|--------|----------------|------------|-----------------|--------|-----------------|----------------|----------------|------------|-----------------|------------|----------------|----------------|
| Š                | ו הפוצי | 09byz8 | Q9d8g5         | 09d8   | Q68ax7         | Q8ner7         | Q78275         | Q8ner6 | P83514         | P83300         | P43137         | P10758         | P83515         | 009049     | Q6trs6 | Q6qx33 | 009037     | Q9prs8         | P48304     | 071rg1 | P83519         | 008731     | Q7t228          | Q8c6f9 | Q9psn0          | P21963         | P42854         | P23132     | Q8jiv9          | Q9psm4     | P352           | Q9cvf4         |
|                  |         | Q9BY28 | Q9D8G5         | Q9D858 | Q68AX7         | Q8NER7         | Q7SZ75         | QBNER6 | STR1_STRCA     | ACAL_ANSAN     | LIT1 MOUSE     | LITH_RAT       | STR2_STRCA     | PAP3 MOUSE | QGTRSG | Q6QX33 | PAP2_MOUSE | OC17_CHICK     | LITB_HUMAN | Q71RQ1 | LECG_BOTJR     | LIT2_MOUSE | Q7T2 <u>2</u> 8 | Q8C6F9 | LECG BITAR      | LECG_CROAT     | PAP3_RAT       | LITH BOVIN | Q8JI <u>V</u> 9 | LECG_LACST | PAP2_RAT       | Q9CVF4         |
| 9                | 2 !     | 7      | ~              | N      | 7              | 7              | N              | ~      | Н              | -              | Н              | Н              | -1             | Н          | ~      | 7      | Н          | Н              | Н          | ~      | Н              | Н          | ~               | ~      | Н               | Н              | Н              | ⊣          | 7               | -          |                | N              |
| 1<br>1<br>2<br>1 | -i      | 158    | 157            | 157    | 157            | 113            | 160            | 134    | 132            | 132            | 165            | .165           | 142            | 174        | 164    | 158    | 175        | 142            | 166        | 158    | 135            | 173        | 126             | 126    | 135             | 135            | 174            | 175        | 154             | 135        | 174            | 146            |
| Query            | March   | 100.0  | 68.4           | 67.7   | 67.6           | 62.0           | 49.9           | 35.0   | 29.7           | 29.4           | 29.0           | 29.0           | 28.1           | 28.1       | 27.9   | 27.7   | 27.6       | 27.5           | 27.3       | 27.1   | 27.0           | 26.9       | 26.9            | 26.8   | 26.7            | 26.5           | 26.3           | 26.3       | 26.3            | 26.1       | 26.0           | 25.9           |
| 3                | acore   | 878    | 600.5          | 594.5  | 593.5          | 544            | 438.5          | 307.5  | 260.5          | 258.5          | 254.5          | 254.5          | <b>EM</b>      | 246.5      | 245    | 243.5  | 242        | 241.5          | 240        | 237.5  | 237            | 236.5      | 236             | 235    | 234             | 233            | 231            | 231        | 230.5           | 229        | 228.5          | 227.5          |
| Result           | 2       | -      | 0              | m      | 4              | ស              | ω              | 7      | ω              | σ              | 10             | 11             | 12             | 13         | 14     | 15     | 16         | 17             | 18         | 19     | 20             | 21         | 22              | 23     | 24              | 25             | 26             | 27         | 28              | 59         | 30             | 31             |

| 090wi7 bungarus fa<br>066x51 echis pyram<br>06x584 echis carin<br>06x584 echis carin<br>06x584 bile gabon<br>002988 pleurodeles<br>0677b5 bitis gabon<br>0611v8 agkistrodon<br>00611 homo saplen<br>06x587 echis pyram<br>06x587 echis carin<br>06x589 echis carin<br>06x589 echis carin<br>06x589 echis carin<br>06x589 echis carin |
|--|
| Q90WI7<br>Q90WI8<br>Q0XXSI<br>Q0XXSI4<br>LITA HUMAN<br>LICA PLEWA<br>G071BS<br>Q9JIVB<br>PAPI HUMAN<br>Q0XXSI3<br>Q0XXSI3<br>Q0XXSI9<br>Q0XXSI9  |
| 000004400400000  |
| 158<br>1158<br>1146<br>1166<br>1157<br>1155<br>1148<br>1148<br>1148  |
| 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |
| 227<br>225.5<br>225.5<br>225.5<br>225.5<br>220.5<br>221.5<br>210.5<br>219.5<br>219.5<br>219.5<br>219.5<br>219.5<br>219.5<br>219.5  |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 YGNGAHLASILSLKEASTIABYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSG 120
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STROINCE FROM N.A.
STRAIN-C57BL/6J; TISSUE=Small intestine;
STRAIN-C57BL/6J; TISSUE=Small intestine;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Mus musculus adult male small intestine cDNA, RIKEN full-length
enriched libzary, clone-2010002L15 product:REGENERATING GENE TYPE IV,
full insert sequence (Reg4 protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 878; DB 2; Length 158; 100.0%; Pred. No. 2.5e-78; ive 0; Mismatches 0; Indels (
                                                                                                                                                                                             R EMBL; AY00743; AAG02562.1; --
R EMBL; AY106743; AAG02562.1; --
R EMBL; AY106743; AAG02562.1; --
R EMBL; AY10670; AAM59869.1; --
R EMBL; AY10670; AAM17089.1; --
R EMBL; AY207089; AAM17089.1; --
R EMBL; AP254415; AAK48435.1; --
R HSP; P2200; 11JK.
R Genew; HGNC:2297; REG4
C Go: 0005529; F: Bugar binding; IEA.
InterPro; IPR001304; Lectin C.
IPR001304; Lectin C.
IPR001304; Lectin C.
IPR001304; Lectin C.
                                                                                                Strausberg R.;
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
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STRAIN=C57BL/6J; IISSUE=Small intestine;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Potential.
7308849CBBD6E93E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 KSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYRP 158
  and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam, PF00059; Lectin C; 1.
PRINTS; PR01504; BNCREATITSAP.
SMART; SMO0134; CLECT; 1.
PROSITE; PS00615; C_TYPE_LECTIN 1; UNKNOWN 1.
PROSITE; PS50041; C_TYPE_LECTIN 2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    157 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2001 (TrEMBLrel. 17, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIĞNAL 1 22 P.
SEQUENCE 158 AA; 18230 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 158; Conservative
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SEQUENCE FROM N.A.
                                     [5]
SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Signal.
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EXURANTE FROM TISSUE-COLON;

RX MEDINEE-2288627; Pubmed=12477922; DOI=10.1073/pnas.242603899;

RX MEDINEE-2288627; Pubmed=12477922; DOI=10.1073/pnas.242603899;

RX Rlausner R.D., Teingold E.A., Grouse L.H., Derge J.G.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA HORKINS R.P., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA HORKINS R.P., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA S.S., Loquellano N.F., Peters G.J., Abramenon R.D., Mullahy S.J.,

RA S.S., Loquellano N.A., Peters G.J., Abramenon R.D., Mullahy S.J.,

RA S.S., Loquellano N.A., Peters G.J., Abramenon R.D., Mullahy S.J.,

RA S., McEwan P.J., McErnan K.J., Malek J.A., Gubarathe P. H.,

RA S., McEwal P.J., McErnan K.J., Malek J.A., Gubarathe P. H.,

RA S., Loquellano N.M., Sodergen B.J., Lu X., Gibbs R.A.,

RA S., Mullalon D.K., Muzny D.M., Sodergen B.J., Lu X., Gibbs R.A.,

RA S., McHing M., Madan A., Young A.C., Shevchanko Y., Bouffard G.G.,

RA Mitling M., Madan A., Young A.C., Shevchanko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Lones S.J., Marra M.A.,

Jones S.J., Marra M.A.,

Reneration and initial analysis of more than 15,000 full-length human rand mouse cDNA sequences.",

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

Adachi J., Alzawa K., Akahira S., Akimura T., Arai A., Aono H.,

Adachi J., Alzawa K., Akahira S., Akimura T., Putunishi Y., Furuno M.,

Arakawa T., Bono H., Carninci P., Fukuda S., Fukunishi Y., Furuno M.,

Hangagaki T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,

Managaki T., Ishii Y., Itoh M., Izawa M., Kabukawa T., Rako H.,

Matchi K., Ishii Y., Konno H., Kouda M., Koya S., Kurihara C.,

Matchi Y., Okido T., Owa C., Salto H., Salto R., Sakai C., Sakai K.,

Sano H., Sasaki D., Shibata Y., Shinagawa A., Shiraki T.,

Ragabe Y., Suzuki H., Tagami M., Tagawa A., Takahahi F., Tanaka T.,

Tejima Y., Toya T., Yamamura T., Yasunishi A., Yoshida K., Yoshino M.,

Muramatsu M., Hayashizaki Y.,

Submitted (UUL-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                           SEQUENCE FROM N.A. SEQUENCE FROM N.A. TISSUE-Small intestine; STAIN-67STBL/67; TISSUE-Small intestine; The FAWTOM Consortium, the RIKEN Genome Exploration Research Group Phase I & II Team; the RIKEN Genome Exploration Research Group Phase I & II Team; Analysia of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs."; Nature 420:563-573(2002).
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MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100;
MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Korno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Normo H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Normo H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Drepare full-leath con A libraries for rapid discovery of new genes.";
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SEQUENCE FROM N.A.

SETALN=CSTBL/G1 TISSUE=Small intestine;

MEDLINE=20530913, PubMed=11076861, DOI=10.1101/gr.152600;

Shibbta K., Itch M., Akizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akizawa J., Niabi K., Kitsunai T., Tashiro H., Itch M., Sumin J., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Puliwake S., Inoue K., Togawa W., Tawak T., Matsunia S., Watshiki M., Yoneda Y., Ishikawa T., Ozawa K., Tamaka T., Matsunia S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

SEQUENCING PIPELIA S., Matsunia S., Kawai J., Sequencing pipeline with 384 multicapillary sequencer.";
RIKEN FANTOM Consortium;
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Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE IV,
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Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
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01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Mus musculus adult male small intestine cDNA, RIKEN full-length
enriched library, clone:2010204K21 product:REGENERATING GENE TY
full insert sequence.
                                                                                                                                                                                                                   Query Match 68.4%; Score 600.5; DB 2; Length 157; Best Local Similarity 66.2%; Pred. No. 4.8e-51; Matches 104; Conservative 25; Mismatches 27; Indels 1.
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STRAIN=C57BL/6J; TISSUE=Small intestine;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
                                 Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databages.
EMBL; AKO08049; BAB25429.1; -.
EMBL; BCO19465; AAH19465.1; -.
HSSP; Q06141; 1UV0.
                                                                                                                                           Pfam; PF00059; Lectin C; 1.
PRINTS; PR01504; PNCREATITSAP.
SMART; SM00034; CLECT; 1.
PROSITE; PSS0041; C TYPE LECTIN 2; 1.
SEQUENCE 157 AA; 18398 MW; F3981722BBD83968 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                    STRKSEARHCAEMNPKDKFLTWNKNGCANRQHFLCKYK 156
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                                                                                                       GO; GO:0005615; C:extracellular space; TAS.
InterPro; IPR001304; Lectin C.
InterPro; IPR003990; Pancreatis ac.
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STRAIN=CS7BL/6J; TISSUE=Small intestine;
The FANTOM CONSORTium,
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           SEQUENCE FROM N.A.
STRAIN=FVB/N; TISSUE=Colon;
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                                                                                              MGI:1914959; Reg4.
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Arakawa T. Arawa N. Akahira S., Akimura T., Arai A., Aono H.,
Arakawa T., Bono H., Carninci P., Fukuda S., Fukuda S., Furunishi Y., Furuno M.,
A Arakawa T., Bono H., Carninci P., Fukuda S., Fukuda S., Fukunishi Y., Furuno M.,
A Hanagaki T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,
A Hanagaki T., Kojima Y., Kono H., Kowda M., Koya S., Kurihara C.,
A Kawai J., Kojima Y., Kono H., Kowda M., Koya S., Kurihara C.,
A Kawai J., Kojima Y., Nishi K., Nomura K., Numazaki R., Ohno M.,
A Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sakai K.,
Sano H., Sasaki D., Shibata K., Shibata Y., Shinaqawa A., Shiraki T.,
Sogabe Y., Suzuki H., Tagawa M., Takahashi F., Tanaka T.,
A Fejima Y., Toya T., Yasumaura T., Yasunishi A., Yoshida K., Yoshino M.,
L Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.

B. MSSP, Q06141; LUVO.
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SEQUENCE FROM N.A.
STRALNE-C57BL/G0; TISSUE-Small intestine;
MEDLINE-C57BL/G0; TISSUE-Small intestine;
MEDLINE-20499374; PubMed-11042159; DOI-10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Mornalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
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                                                                                                                                                                                                                                                                                                                                                           MEDLINE-20530913; PubMed=11076861; DOI=10.1101/gr.152600; Bibbata K., Ttoh M., Alzawa K., Nagaoka S., Sasaki N., Carninci P., Shibata K., Itoh M., Alzawa K., Nagaoka S., Sasaki N., Carninci P., Sunio H., Akiyama J., Nishi K., Katsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiiwagi K., Fujiwake S., Inoue K., Togawa W., Izawa M., Ohara E., Watshiiwagi K., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Rikike integrated sequence analysis (RISA) system-384-format Genome Res. 10:1757-1771(2000).
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es 28; Indels
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157 AA; 18474 MW; FD96F36CFB989368 CRC64;
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Last annotation update)
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MGD; MGI:1914959; Reg4.
G0; G0:0005515; C:extracellular space; TAS.
InterPro; IPR001304; Lectin C.
InterPro; IPR0013990; Pancreatis_ac.
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PRINTS; PR01504; PNCREATITSAP.
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Q68AX7;
25-OCT-2004 (TrEMBLrel. 2.
25-OCT-2004 (TrEMBLrel. 2.
25-OCT-2004 (TrEMBLrel. 2.
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61 YGNGAHLASILSLKEASTIAEYISGYORSOPIWIGLHDPOKR 102
                             61 YGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKQ 102
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Q7SZ75
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                   Rattus norvegicus (Rat).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                    SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STATEWHISTALE STATEMENT TISSUE=Ileum,
Mamikkawa K., Murakami K., Fukushima M., Kiyama H.;
"Differential regulation of Reg family member expression after
periperal nerve injury.",
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
EMBL, ABL64049, BAD3867311, -
InterPro, IPR001399; Pancreatis_ac.
                                                                                                                                                                                                                                                                                  67.6%; Score 593.5; DB 2; Length 157; 66.5%; Pred. No. 2.3e-50; ive 21; Mismatches 31; Indels 1.
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SEQUENCE FROM N.A.
Kamarainen M., Heiskala K., Heiskala M., Andersson L.C.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AX126671; AAM95599.1; -.
HSSP; P21963; JUZN.
GO; GO:0005529; P:sugar binding; IEA.
InterPro; IPR001999; Panctain C.
InterPro; IPR001999; Pancreatis_ac.
                                                                                                                                                                                                        Pfam; PF00059; Lectin_C; 1.
PRINTS; PR01504; PNCREATITSAP.
SMRAT; SM00034; CLECT; 1.
PROSITE: PSS0041; C_TYPE_LECTIN_2; 1.
SEQUENCE 157 AA; 18269 MW; $58129F910BA4DID_CRC64;
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PRINTS; PR01504; PNCREATITSAP.
SMART; SM00034; LCTT; 1.
PR05TE; PS50941; LC TYPE LECTIN 2; 1.
SEQUENCE 113 AA; 12832 Mw; \(\begin{array}{c} AZE9DF1A729C78DA CRC64; \end{array}\)
                                                                                                                                                                                                                                                                                                                                                                                                                                         121 KSMGGNKHCAEMSSNNNFLTWSSNECNKROHFLCKYRP 158
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Last annotation update)
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Regenerating islet-derived family member 4.
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01-OCT-2002 (TrEMBLrel. 22, Last seq
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REG-like protein splice variant 1.
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es 105; Conservative
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MEDLINE=22380557; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.
RA Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.R., Schuler G.D.,
Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.R., Schuler G.D.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Branchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Raplacton M.J., Usdin T.B., Tonhiyuki S., Carninot P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rehey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Rodriguez A.C., Grimwood J., Schwutz D.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Schein J.B.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimman M.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimphyers R.M., Butterfield Y.S.,
Rodriguez A.C., Grimphyers R
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                                                                                                                                                                                                                                          MGC64513 protein.
Xenopus laevis (African clawed frog).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Amphibia; Batrachia, Anura, Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDILINE-22341132; PubMed=12454917; DOI=10.1002/dvdy.10174; Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W., Richardson P.; "Genetic and genomic tools for Xenopus research: The NIH Xenopus inttiative..."; Dev. Dyn. 225:384-391(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 49.9%; Score 438.5; DB 2; Length 160; Local Similarity 48.7%; Pred. No. 4.1e-35; es 75; Conservative 35; Mismatches 41; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Klein S., Strausberg R.;
Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; BC058117; AAH53817.1; -
HSSP; P22897; 1EGG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GO; GO:0005529; F: Bugar binding; IEA.
InterPro; IRR001304; Lectin_C.
SWART; SM00059; Lectin_C.1.
PROSITE; PS00415; C_TYPE_LECTIN_1; 1.
PROSITE; PS00415; C_TYPE_LECTIN_2; 1.
SEQUENCE 160 AA; _18330 MW; 6AS502F24689179A CRC64;
                                                                                       01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
PRT; 160 AA
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xenopodinae; Xen
NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Whole;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
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7

Gaps

2

62

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RESULT 7 Q8NER6

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87 QRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSGKSMGGNKHCAEMSSNNNFLTWSSNEC 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 EEEEDVWIGLF--RWNSVWAWIDGSKKKHYSALDDDDYPKGKKCAVLDESSGFLSWDNDSC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBUNIT: Homodimer or homotrimer.
-!- SUBCELLULAR LOCATION: Eggshell matrix. May be present in the shell glands on the walls of ounder and incorporated into the shell structure during its formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 CPKGWLDFRGNCYGYFRYELPWKRAEAWCRSIRAGAHLASIHTSEEHRAIAKFISQYHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30 CAPGWFYHKSNCYGYFRKLRNWSDAELECOSYGNGAHLASILSLKEASTIAEYISGY---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=22439773; PubMed=12431998; DOI=10.1074/jbc.M201518200; Lakshminarayanan R., Vallyaveettil S., Rao V.S., Kini R.M.; Purification, characterization, and in vitro mineralization studies of a novel goose eggshell matrix protein, ansocalcin."; J. Biol. Chem. 278:2928-2936(2003)
-!- FUNCTION: Induces spherical aggregates of calcite crystals in vitro. Believed to play an active role in the eggshell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i- MASS SPECTROMETRY: MW=15342; METHOD=Electrospray; RANGE=1-132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anser anser anser (Western graylag goose).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Anseriformes; Anatidae; Anser.
                                                                                                                                                                                                                                                                                                                                                                  29.7%; Score 260.5; DB 1; Length 132; 38.8%; Pred. No. 1.1e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION, SUBUNIT, SUBCELLULAR LOCATION, AND MASS
                                                                                                                                                                                                                                                                                                                                                                                                                          54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NOTE=Ref.1.
-!- SIMILARITY: Contains 1 C-type lectin family domain.
                                                                                                                                                                                                                                                                                                            F7BD1DF2990B2945 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   132 AA.
                                                                                                                                                                                                              By similarity.
By similarity.
By similarity.
                                                                                                                                                                                                                                                                                                                                                                                                    ; Pred. No. 1.1e
20; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-type lectin.
By similarity.
                                                                                                                                                                                  C-type lectin
PRINTS; PR00356; ANTIFREEZEII.
PRINTS; PR01504; PNREATITSAP.
SMART; SM0034; CleCT; 1.
PROSITE; PS00615; C_TYPE_LECTIN_1; 1.
PROSITE; PS50041; C_TYPE_LECTIN_2; 1.
Direct protein sequencing; Lectin.
10 129 C-type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PSO0615; C_TYPE_LECTIN_1; 1.
PROSITE; PS50041; C_TYPE_LECTIN_2; 1.
Direct protein sequencing; Lectin.
DOMAIN
DISULPID 3 14 By simil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HSSP, P23806, 1J34.
InterPro; IPR002355; AntifreezeII.
InterPro; IPR001304; Lectin C.
InterPro; IPR003990; Pancreatis ac.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam, PF00059; Lectin C; 1.
PRINTS, PR00356; ANTIFREEZEII.
PRINTS; PR01504; PRCREATITSAP.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                         132 AA; 15353 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                50; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                     14
128
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Eggshell matrix;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    147 NKRQHFLCK 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 GERNAFICK 129
                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=8844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAL ANSAN
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                                                                                                                                                                                                                                              DISULFID
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                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                     Query Match
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         RARRAFIFFS
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                                                                    68 ASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRSW-SGKSMGGN 126
                                                                                              26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LLLLPGALAVSNVLEAAQVRSSCPNGWFFYKANCYGYFRYPLSWAEAEYDCQAYGHGAHL 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MASRSMRLLLLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAEL---
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TISSUE-EGGSHell matrix;

TISSUE-EGGSHell matrix;

TISSUE-EGGSHell matrix;

PubMed-1476503; DOI=10.1016/j.bbapap.2003.09.006;

Mann K., Siedler F.;

"Ostrich (Struthio camelus) eggshell matrix contains two different C-

T type lectin-like proceins. Isolation, amino acid sequence, and

posttranslational modifications.";

Elochim. Biophys. Acta 1696:41-50(2004).

-!- SUBCELLULAR LOCATION: Eggshell matrix.

-!- MASS SPECTROMETRY: MW=15343.2; MW=ERR=4; METHOD=Electrospray;

C -!- MASS SPECTROMETRY: M=15343.2; MW=ERR=4; METHOD=Electrospray;

C -!- SIMILARITY: Contains 1 C-type lectin family domain.

R InterPro; IPR001394; Lectin C.

R InterPro; IPR001394; Deacreatis_ac.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ပ်
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35.0%; Score 307.5; DB 2; Length 134;
55.9%; Pred. No. 2.6e-22;
iive 9; Mismatches 9; Indels 31; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       different
e, and
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Archosauria, Aves, Palaeognathae, Struthioniformes, Struthionidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 ------ECQSYGNGAHLASILSLKEASTIAEYISGYQRSQPIWI 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
Kamarainen M., Heiskala K., Heiskala M., Andersson L.C.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AX126672; AAM95600.1; -.
SEQUENCE 134 AA; 14993 MW; BOESAD9B96A53EBS CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
REG-like protein splice variant 2.
                                                                                                                                                                                     127 --KHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP 158
                                                                                                                                                                                                                     05-JUL-2004 (Rel. 44, Created)
05-JUL-2004 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Struthiocalcin-1 (SCA-1).
Struthio camelus (Ostrich).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    132 AA
                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
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Matches
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

STRAIN=6278BL/62; TISSUB—THymus;

KAUSHER C. Colling F.S., Grouse L.H., Derge J.G.,

RA Klausher R.D., Colling F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Klausher R.D., Colling F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Distribution M.J., Marushima K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M.J., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Ugdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Rha S.S., Loquellano N.A., Peters G.J., Malek J.A., Gunarathe P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Willalon D.K., Muzny D.M., Gacers E.J., Lu X., Gibbs R.A.,

RA Hiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

RA Schnerch A., Schein J.E., Jones S.J.W., Marra M.A.,

RA Schnerch A., Schein J.E., Jones S.J.W., Marra M.A.,

RA Schnerch A., Schein J.E., Jones B.J.W., Marra M.A.,

RA Schnerch A., Schein J.E., Jones B.J.W., Marra M.A.,

RA Schnerch A., Schein J.E., Jones B.J.W., Marra M.A.,

RA Schnerch A., Schein J.E., Jones Han 15,000 full-length human and marrance "M.A."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90 QP---IWIGLHDPQKRQQWQ----WIDGAMYLYRSWSGKSMGGNKHCAEMSSNNNFLTWS 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : :||||| : ::|::|
63 EEEDNVWIGLH------HWNQARVWIDGSKKRYSAWDDDELPRGKYCTVLEGSSGFMSWE 116
                                                                                                                                                                                                                                                                                                                                                                              3 CPKGWLDFRGSCYGYFGQELTWRKAEAWCKVIHAGCHLASLHSPEEHAAVARFIAKFQRR 62
                                                                                                                                                                                                                                                                                                                           30 CAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISGYQRS 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
05-UN-2004 (Rel. 44, Last annotation update)
Lithostathine 1 precursor (Pancreatic stone protein 1) (PSP)
Fancreatic thread protein 1) (PTP) (Islet of langerhans regenerating protein 1) (REG 1).
                                                                                                                                                                                                                                         50; Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=93340209, PubMed=8340418,
MEDLINE=93340209, PubMed=8340418,
Moriizumi S., Okamoto H., Itoh T., Teraoka H.;
Moriizumi S., Okamoto H., Itoh T., Teraoka H.;
"Structure, chromosomal localization, and expression of mouse reggenes, reg I and reg II. A novel type of reg gene, reg II, exists in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rame-krajs,
Mus musculus,
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and mouse cDNA sequences.";

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

-I- FUNCTION: Might act as an inhibitor of spontaneous calcium carbonate precipitation.

-I- TISSUE SPECIFICITY: Expressed only in regenerating islets and
                                                                                                                                                                Match 29.4%; Score 258.5; DB 1; Length 132; Local Similarity 34.3%; Pred. No. 1.7-17; Conservative 25; Mismatches 50; Indels 13. Les 46; Conservative 25; Mismatches 50; Indels 13.
                                             ' similarity.
36CE42EA4572E6B7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mouse genome.";
Biol. Chem. 268:15974-15982(1993)
31 128 B
103 120 B
132 AA; 15347 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              143 SNECNKRQHFLCKY 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     117 DNACSERNPFVCKY 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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P43137;
DISULFID
DISULFID
SEQUENCE
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Matches
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ibb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55 ELECQSYGNGAHLASILSLKEASTIAEYI -- SGYQRSQPIWIGLHDPQKRQQWQWIDGAM 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1989 (Rel. 11, Created)
01-JUL-1989 (Rel. 11, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Lithostathine precursor (Pancreatic stone protein) (PSP) (Pancreatic thread protein) (PTP) (Islet cells regeneration factor) (ICRF).
Name=Regl: Synonyms=Reg;
Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 LLLSCLAKTGVLGDIIMRP-----SCAPGWFYHKSNCYGYFRKLRNWSDA
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Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus,
NCBI_TaxID=10116;
normal exocrine pancreas, but not in normal pancreatic islets. Expressed strongly in pancreas, moderately in gallbladder, and weakly in liver.
SIMILARITY: Contains 1 C-type lectin family domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29.0%; Score 254.5; DB 1; Length 165; Ilarity 31.1%; Pred. No. 5.2e-17; Conservative 35; Mismatches 51; Indels 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       113 YLYRSW-SGKSMGGNK-HCAEMSSNNNFLTWSSNECNKRQHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE-91093273; PubMed-1985964;
Rouquier S., Verdier J.M., Iovanna J., Dagorn J.-C., Giorgi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 21 By similarity.
22 165 Lithostachine 1.
33 46 By similarity.
63 161 By similarity.
136 By similarity.
137 By similarity.
138 129 N-linked (GlCNAc. . .) (Pc. 165 AA, 18518 MW, 2950174AF5D666BA CRC64,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            165 AA.
                                                                                                                                                                                                                 EMBL, D14010; BAA03111.1; -.
EMBL, BC028761, AAH28761.1; -.
PTR, A47148; A47148.
HSSP; P05451; 1LIT.
MGD; MGI:97895; Reg.1
InterPro; IPR001303; Antifreezell.
InterPro; IPR001304; Lectin C.
InterPro; IPR001304; Lectin C.
PRAM; PR0055; Lectin C; 1.
PRINTS; PR00356; ANTIFREEZEII.
PRINTS; PR00356; ANTIFREEZEII.
PRINTS; PR00356; ANTIFREEZEII.
PROSTIE; PR00011; C. TYPE LECTIN 1; 1.
PROSTIE; PS00041; C. TYPE LECTIN 1; 1.
PROSTIE; PS00041; C. TYPE LECTIN 1; 1.
PROSTIE; PS00041; C. TYPE LECTIN 2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE LECTIN 1; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein;
SIGNAL
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Matches
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                                                                                                                                                        MEDLINE=93326645; PubMed=7916640; DOI=10.1016/0167-4781(93)90100-R; Dusetti N.J., Frigerio J.M., Dagorn J.-C., Iovanna J.L.; "Rapid PCR cloning and sequence determination of the rat lithostathine

carbonate precipitation.
-I- TISSUE SPECIFICITY: Expressed only in regenerating islets, but not in normal pancreatic islets, insulinomas or regenerating liver.
-I- SIMILARITY: Contains 1 C-type lectin family domain.

                                                                                                                                                                                                                                                                                                                                                        Adrich Z., de Caro A.M., Guidoni A.A., Woudstra M.E., Rovery M.; "Characterization in rat pancreatic juice of a protein homologous to the human pancreatic stone protein." (Comp. Biochem. Physiol. 938:793-797(1989).
expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .linked (GlcNAc. . .) (Potential). 9B61EB236B82CF8A CRC64;
"Rat pancreatic stone protein messenger RNA. Abundant expression nature exocrine cells, regulation by food content, and sequence identity with the endocrine reg transcript.";
J. Biol. Chem. 266:786-791(1991).
                                                                                 Miyashita H., Suzuki Y., Watanabe T., Unno M., Moriizumi S., Yonekura H., Okamoto H., "Structure and characterization of rat Reg I gene."; Seikagaku 65:1082-1082(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00615; C_TYPE_LECTIN_1; 1.
PROSITE; PS50041; C_TYPE_LECTIN_2; 1.
Direct protein sequencing; Glycoprotein; Lectin; Signal.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lithostathine.
C-type lectin.
By similarity.
By similarity.
By similarity.
N-linked (GlCNAC.
                                                                                                                                                                                                        Biochim. Biophys. Acta 1174:99-102(1993)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSSP, PO5451; 1LIT.
RGD; 3552; Reg1.
INTERPRO; 1PR001304; Lectin_C.
InterPro; IPR003990; Pancratis_ac.
Pfam; PF00059; Lectin_C; 1.
                                                           SEQUENCE FROM N.A.
MEDLINE=88115343; PubMed=2963000;
                                                                                                                                                                                                                                                                                                                                               MEDLINE=90031455; PubMed=2680252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS; PRO1504; PNCREATITSAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18672 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; L07512; AAA41533.1; -. EMBL; M62930; AAA41974.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; M18962; AAA42028.1; -.
EMBL; D26164; BAA05149.1; -.
PIR; A28351; A28351.
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129
165 AA;
                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 22-69
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                                                                                                                                                                                                                                             STRAIN=Wistar;
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DB 1; Length 165;

Score 254.5; DB 1 Pred. No. 5.2e-17;

29.0%; 30.6%;

Query Match Best Local Similarity

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7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND SECUENCE, SUBCELLULAR LOCATION, PHOSPHORYLATION SITES SER-66, AND SER-68, AND MASS SPECTROMETRY.

TISSUE-Eggshell matrix;

X bubmed=14726203, DOI=10.1016/j.bbapap.2003.09.006;

X bubmed=14726203, DOI=10.1016/j.bbapap.2003.09.006;

And man X., Siedlar F.;

Mann X., Siedlar F.;

Type lectin-like proteins. Isolation, amino acid sequence, and posttranslational modifications.";

Topstranslational modifications.";

Dostranslational modifications.";

Bochim. Blophys. Acta 1696:41-50(2004).

L. SIDELLULAR LOCATION: Eggshell matrix.

-1- MASS SPECTROMETRY: MM-ER814.1; MM-ERR=2; METHOD=Electrospray;

RANGE=1-142; NOTE=Ref.1.

C. -1- SIMILARITY: Contains 1 C-type lectin family domain.

RINEPRO: IPRO01399; Pancreatis_ac.

Ream; PF00059; lectin_c; 1.

REAM: PRO1504; PROREMATISAP.
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                                                                                                                                                    52 SDAELECQSYGNGAHLASILSLKEASTIAEYI--SGYQRSQPIWIGLHDPQKRQQWQWID 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87 Q------RSQPIWIGLHDPQKRQQWQWIDGAMYLYRSWSGKSMGGNKHCAEMSSNNNF 138
                                                                                                                                                                                 S KYFILLSCL------MVLSPSQQQBABEDLPSARITCPEGSNAYSSYCYYFMEDHLSW 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                    7 RILLLLSCLAKTGVLGDIIMRPS------CAPGWFYHKSNCYGYFRKLRNW 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27 RPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISGY 86
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Archosauria, Aves, Palaeognathae, Struthioniformes, Struthionidae,
                                                                                                                                                                                                                                                                                 110 GAMYLYRSW-SGKSMGGNK-HCAEMSSNNNFLTWSSNECNKRQHFLCKYR 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66; Indels
  51; Indels
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AF9950BF166B8FF9 CRC64;
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PROSITE; PS50641; C_TYPE_LECTIN_2; 1.
Direct protein sequencing; Lectin; Phosphorylation.
DOMAIN 13 139 C-type lectin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28.1%; Score 247; DB 1; 34.5%; Pred. No. 2.4e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUL-2004 (Rel. 44, Last sequence update) 05-JUL-2004 (Rel. 44, Last annotation update) Struthiocalcin-2 (SCA-2) struthio camelus (Ostrich).
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By similarity.
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By similarity.
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     38; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 P)
16601 MW;
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     52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
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68
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P83515;
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SEQUENCE
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123 ATWDVELCSDRKPFICEYR 141

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63 NGAHLASILSLKEASTIAEYI-SGYQRSQPIWIGLHDP-----QKRQQWQWIDGAMYLYR 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 LLLSCL-AKTGVLGDII-----MRPSCAPGWFYHKSNCYGYFRKLRNWSDAELEÇQSYG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 MLLSCLMLLSQVQGEVAKKDAPSSRSSCPKGSRAYGYCYALFSVSKNWYDADMACQKRP 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Acute phase, Inflammatory response, Lectin, Multigene family, Signal. SIGNAL 1 26 Potential.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15; Gaps
                                                                                                                                                                                 [1]
SEQUENCE FROM N.A.
STROINCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-Liver, and Pancreas;
STRAIN-C57BL/6J; TISSUE-Liver, and Pancreas;
MEDLINE=97208868; PubMed=9055810; DOI=10.1016/S0378-1119(96)00589-6;
MEDLINE=9720868; PubMed=9055810; DOI=10.1016/S0378-1119(96)00589-6;
MATUSHINA Y., Unno M., Nakagawara K.-I., Mori M., Miyashita H.,
Suzuki Y., Noguchi N., Takasawa S., Kumagai T., Yonekura H.,
Suzuki Y., Noguchi N., Takasawa S., Kumagai T., Yonekura H.,
                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pancreatitis-associated protein 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28.1%; Score 246.5; DB 1; Length 174; 35.2%; Pred. No. 3.4e-16; ive 24; Mismatches 66; Indels 15;
                          01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 44, Last annotation update)
Pancreatitis-associated protein 3 precursor (REG III-gamma).
Name=Pap3; Synonyme=Reg3g;
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                    healthy pancreas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         similarity.
5575E9E56A4D8CEF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMART; SM00034; CLECT; 1.
PROSITE; PS00615; CLYPE_LECTIN_1; FALSE_NEG.
PROSITE; PS50041; CLYPE_LECTIN_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-type lectin.
By similarity.
By similarity.
By similarity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGD; MGI:109406; Reg3g.
InterPro; IPR001304; Lectin C.
InterPro; IPR003990; Pancreatis_ac.
Pfam; PP00059; Lectin C; 1.
PRINTS; PR01504; PNCREATITSAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27 174 Pa:
38 174 C--
40 51 By
68 170 By
145 162 By
174 AA; 19307 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; D63361; BAA18930.1; -. EMBL; D63362; BAA18931.1; -.
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STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                              NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57,
MOUSE
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DISULFID
DISULFID
SEQUENCE
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89 SQ-PIWIGLHDPQKRQQWQWIDGAMYLYRSWSGKS----MGGNKHCAEMSSNNNFLTWSSN 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29 SCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLASILSLKEASTIAEYISGYQR
                                                                                                                                                                                                                                                                                                                          TISSUE=Venom;

PubMed=15135412; DOI=10.1016/j.pep.2004.02.012;

Rassab B.H., de Carvalho D.D., Oliveira M.A., Baptista G.R.,

Pereira G.A., Novello J.C.;

Cloning, expression, and structural analysis of recombinant BJCuL,

c-type lectin from the Bothrops jaratacussu snake venom.";

Protein Expr. Purif. 35:344-352(2004).

EMBL, AYSS8642; AAG92957.1;

GO:0005529; F:sugar binding; IEA.

InterPro; IRR001304; Lectin_C.

InterPro; IRR001304; Lectin_C.
                                                                                                                                                                                                                      Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Lepidosauria, Squamata, Scleroglossa, Serpentes, Colubroidea,
Viperidae, Crotalinae, Bothrops.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bothrope insularis (Island jararaca) (Queimada jararaca).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
Viperidae; Crotalinae; Bothrops.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27.9%; Score 245; DB 2; Length 164; 36.9%; Pred. No. 4.5e-16; Live 16; Mismatches 62; Indels
117 SW-SGKSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYR 157
                            132 NWETNPSSSSGNHCGTLSRASGFLKWRENYCNLELPYVCKFK 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE 164 AA; 19070 MW; F88101D4338B94DC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                            Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT; 158 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PRO1504; PRCKEATITSAP.
SMARY; SM00034; CLECT; 1.
PROSITE; PS00615; C TYPE LECTIN 1; 1.
CHAIN 24 157
                                                                                                               PRT;
                                                                                                                                           05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last seq
05-JUL-2004 (TrEMBLrel. 27, Last ann
                                                                                                                                                                                                             Bothrops jararacussu (Jararacussu)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         48; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       145 ECNKRQHFLC 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     145 VCESKNAFLC 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
TISSUE=Venom gland;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=8723;
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                                                                               RESULT 14
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Guimaraes-Gomes V., Oliveira-Carvalho A.L.,
Junqueira-de-Azevedo I.L.M., Dutra D.L.S., Pujol-Luz M., Castro H.C.,
A. P.L., Zingali R.B.;
B.B., AS522120; AR501456.1;
B.B., Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases.
B. GO: GO:0005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin C.
InterPro; IPR001304; Lectin C.
InterPro; IPR001309; Pancreatis_ac.
R. PRINTS; PR00136; Lectin C.
InterPro; PR00136; Lectin C.
InterPro; IPR00136; Lectin C.
InterPro; IPR00136; Lectin C.
InterPro; PR00136; C.
InterPro; IPR00136; C.
InterPro; IPR0014; C.
InterPro; IPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70 ILSLKEASTIAEYISGYQRSQ-PIWIGLHDPQKRQQWQWIDGAMYLYRSWSGKS---MGG 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66 FHLYGESPEIAEYISDYHKGQSEVWIGLMDKKKDFSWEWTDRSCTDYLSWDKNQPDHYQN 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 LLLSCLAKTGVLGDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELECQSYGNGAHLAS 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
27.7%; Score 243.5; DB 2; Length 158;
Best Local Similarity 34.0%; Pred. No. 6e-16;
Matches 51; Conservative 22; Mismatches 68; Indels 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE 158 AA; 18636 MW; 0FA6303E34967EE4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        126 NKHCAEMSSNNNFLTWSSNECNKRQHFLCK 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Search completed: March 3, 2005, 07:53:08
Job time : 179 secs
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